Advant® OCS
with Master software

AdvaCommand® User Interface

Reference Manual

AIGR01 - VALWI01

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Chapter 1 Introduction

1.1 General Information

This document is a catalog of the **Display Elements** and their **Dialogs,** which are used in the design of displays in Advant Station 500 Series of Operator Stations.

The names given to the display elements consist of 6 - 8 characters (the display link element DISP01 is an exception). The first two, three or four characters indicate the object type.

Table 1-1. Object type

Name	Type
AI	Analog Input
AO	Analog Output
DAT	Data Base Parameters
DI	Digital Input
DO	Digital Output
GBI	Binary Object
GCO	User Defined Controller
GRP	Group Start
GU(1 - 6)	User Defined Object
MAN	Manual Station
MOT	Motor Control
PIDA	Adaptive Process Controller
PID	Process Controller
RAT	Ratio Station
REP	Report Display Handling
SEQ	Sequence
TR	Trend
TXT	Text Handling
VAL	Valve Control

The next two characters indicate the display type that the display element is aimed for.

Table 1-2. Display type

Name	Type
GR	Group display
OB	Object display
WI	Object close up display
PD	Process display
SG	Sequence group display
TD	Trend display

The last two characters are sequential numbers.

Examples:

AIGR01 is the display element for an analog input signal aimed for a group display.

PIDOB01 is the object display for a process controller (PIDCON).

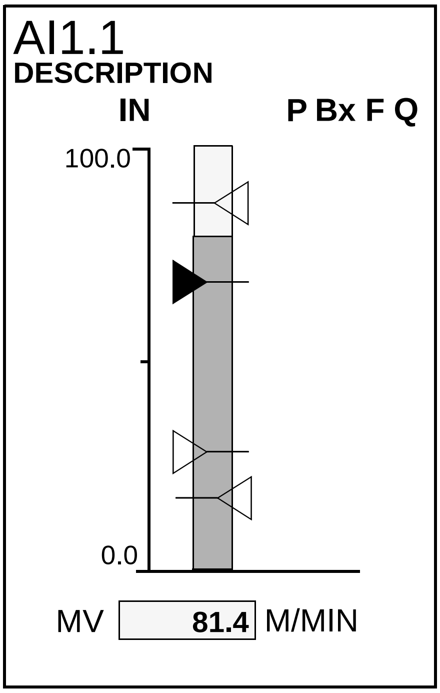
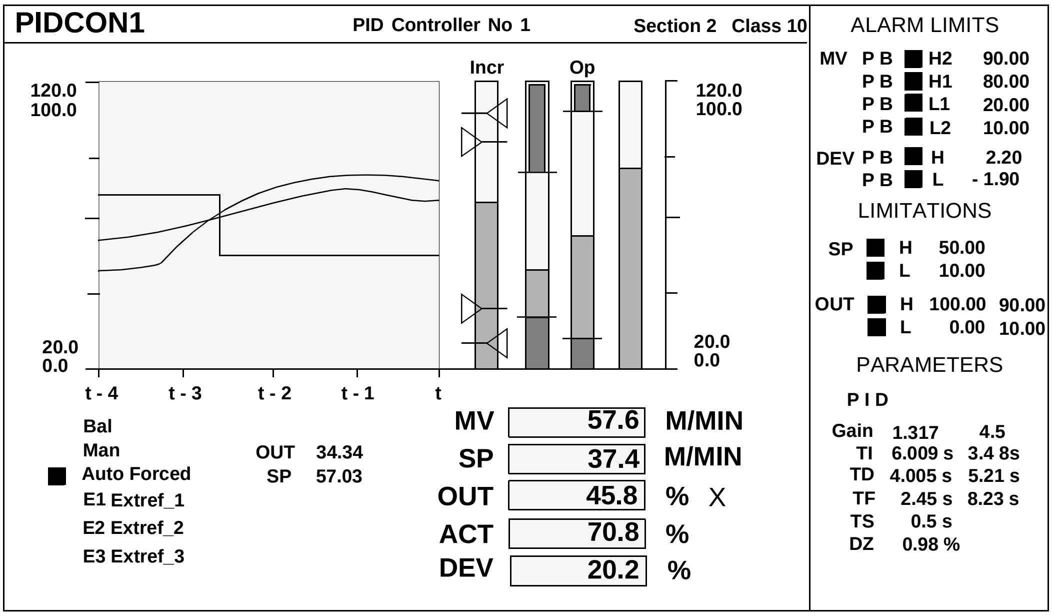


Figure 1-1. Group display with the display element AIGR01



PIDCON1 PID Controller No 1 Section 2 Class 10

Bal
Man
■ Auto Forced
E1 Extref_1
E2 Extref_2
E3 Extref_3

OUT 34.34
SP 57.03

MV 57.6 M/MIN
SP 37.4 M/MIN
OUT 45.8 % X
ACT 70.8 %
DEV 20.2 %

ALARM LIMITS
MV P B ■ H2 90.00
P B ■ H1 80.00
P B ■ L1 20.00
P B ■ L2 10.00
DEV P B ■ H 2.20
P B ■ L - 1.90

LIMITATIONS
SP ■ H 50.00
■ L 10.00
OUT ■ H 100.00 90.00
■ L 0.00 10.00

PARAMETERS
P I D
Gain 1.317 4.5
TI 6.009 s 3.4 8s
TD 4.005 s 5.21 s
TF 2.45 s 8.23 s
TS 0.5 s
DZ 0.98 %

Figure 1-2. Object display for the process controller PIDOB01

All the dialog elements and the dialogs are stated in alphabetic order. The dialogs are described together with the display elements that they belong to and show all available operations that can be performed from the keyboard and the dynamic keys.

The display elements are described in two different tables, one showing the behavior and the second showing the configurable parameters.

Table 1-3. Behavior

No	Description	Presentation	Condition	Remarks

No

Reference number linking to a specific point on the display element shown together with the table.

Description

Short description of what is being presented at the point in question.

Presentation

Short description of the mode, color or form of the presentation employed.

Condition

Property in the database element that is presented or tested for presentation.

Remarks

Additional information specially for the operators.

Table 1-4. Configurable parameters

Parameters	Affects	Options (bold is default)	Remarks

Parameters

Parameters that can be configured by the user.

Affects

Reference to the behavior of the display element.

Options

Permitted values for the parameter.

Remarks

Additional information if required.

Some dialogs have “subdialogs”. Each level of dialog keys are limited to ten dynamic keys. This limitation is eliminated by one key opening further ten keys on a lower level (“subdialogs”). The operator goes down or climbs on a dialog tree. Typical examples are parameter adjustments, limit value adjustments, blocking, and control modes. Keys designated with “...” at the end of the name, e.g. “Block...”, “Limits...”, “Parameters...”, and “Keyboard...”, are provided to open “subdialogs” on a lower level.

D1 Man Forced	D2 E3	D3	D4	D5
D6 OUT	D7 SP	D8	D9	D10 Keyboard…

Figure 1-3. MIN dialog for the PIDCON display element

1.2 Requirements

The display elements software has been pre-installed in your Advant Station 500 Operator Station prior to shipment from factory.

1.3 Related Documentation

Reference information provided in the following manuals will be helpful in using the display elements:

- *AdvaCommand Basic Functions User’s Guide*
- *AdvaBuild Display Builder User’s Guide.*

1.4 Terminology

Display Element

Display elements are the dynamic building blocks of displays. A display element is a view of one or more process or system objects, for example an analog input signal, a pump or a valve. It provides information about the objects, and defines the interaction between them and the user. A display element can be as simple as a numerical value or as complex as a complete object display for a process object.

Display Element Attributes

Display Elements contain static and dynamic parts for presentation, a dialog part for both configuration and process control, an interface part and data subscription part for data exchange with the objects.

Dialog Box

Dialog boxes are called to the screen through the selection of various menu functions during configuration. They are user interactive because they require you to make a selection from among a number of possible choices. No menus are used in run-time.

Dynamic Keys

Dynamic keys are used in run-time in the process dialogs to operate the objects that are selected in a display. They are also used to call up displays or start applications. Dynamic keys can be activated both from the keyboard and from the screen (screen buttons).

Keyboard Focus

More than one window can be displayed at the same time; however, only one window is active at a time. Keyboard focus determines which area of the screen or which element in a window gets input from the keyboard. The active window is indicated by highlighted window borders and title bar.

Menus

Menus are used during configuration. A menu is displayed directly below the button that selects it, and the menu remains open until an action is taken or the menu is explicitly closed. The menu does not require the user to keep the mouse button depressed until the desired item is located and selected. No menus are used in run-time.

Process Dialog

A process dialog is a set of executable operations that can be performed in run-time at a process object. The process dialog is available at two levels, min dialog and max dialog, controlled by the authority key. Process dialogs are performed by means of dynamic keys.

Selecting Objects

You select an object in the display by positioning the pointer at the object and pressing the **Select** key on the trackball or keyboard or clicking the first mouse button. Only a single click or select is required to make a selection.

Workspace

The workspace is that portion of the workstation screen where graphic symbols and display elements are entered and manipulated to configure the display with the Display Builder tool.

1.5 User Interface

1.5.1 Mouse and trackball

All interaction (dialog) for display configuration and process control requires a pointing device and a keyboard. For configuration purpose, the mouse is the most convenient pointing device. In process operation dialogs, the trackball is the normal device. The operator keyboard is used for process control purpose. Otherwise a standard keyboard is used.

Mouse and Button Actions

The mouse buttons are defined as follows:

Select	This is the left button
Drag	This is the middle button

The third right button is not used during display configuration.

Press

Indicates pressing a mouse button without releasing it. This action is used together with the actions drag and release.

Release

Indicates releasing a mouse button after pressing it.

Click

Indicates pressing and releasing a mouse button without moving the pointer.

Double Click

Indicates two clicks quickly without moving the pointer. A double click is used to perform the default action of an object.

Drag

Indicates pressing a mouse button without releasing it and then moving the position of the pointer. The drag action ends with a release action. Dragging is used e.g. when drawing a rectangle or moving a drawn object.

Chapter 2 Configuration and Application Building

2.1 Design Consideration

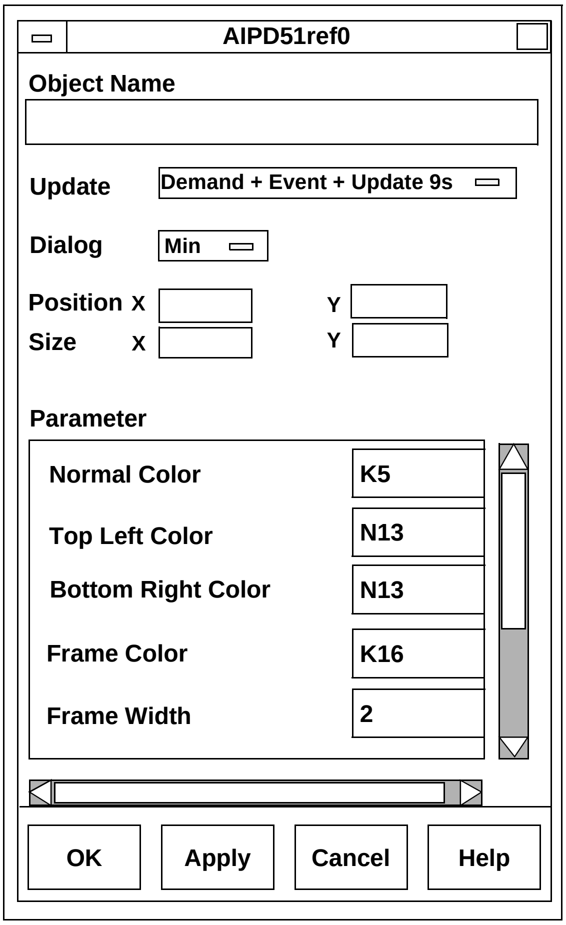
When designing the process displays you must be aware of the load. A cyclic update of the display elements every second is usually not needed and will cause undesired results. The default update for each display element is set to Demand + Event + Update 9s. This is normally sufficient in all common process.

Also the number of display elements in each display must be taken into consideration. The maximal number of display elements depends on the contents of the display element, for example a PIDCON contains much more data than a DI - signal.

2.2 Tutorial

The following example shows how to use this manual as a help to configure an AI - signal.

How to build process displays using the Display Builder software option is described in the Display Builder manual. We assume that the display element AIPD51 is positioned and selected in the workspace and its configuration dialog box is displayed.



AIPD51ref0

Object Name

Update Demand + Event + Update 9s

Dialog Min

Position X Y

Size X Y

Parameter

Normal Color	K5
Top Left Color	N13
Bottom Right Color	N13
Frame Color	K16
Frame Width	2

Figure 2-1. The configuration dialog box for AIPD51

The configuration dialog box shows Min dialog as default. This means that the Min dialog is normally available, unless you have the authority key, then the Max dialog is available.

The dialogs are stated in Chapter 4.

In the lower part of the box is a list of configurable parameters, in this case NormalColor, TopLeftColor, BottomRightColor and so on. All the parameters have default values.

You can also find the parameters in the tables for AIPD51, see the extract of the table below. In the **Option** column is stated the admitted alternatives. The **Affects** column shows which properties the parameters will affect.

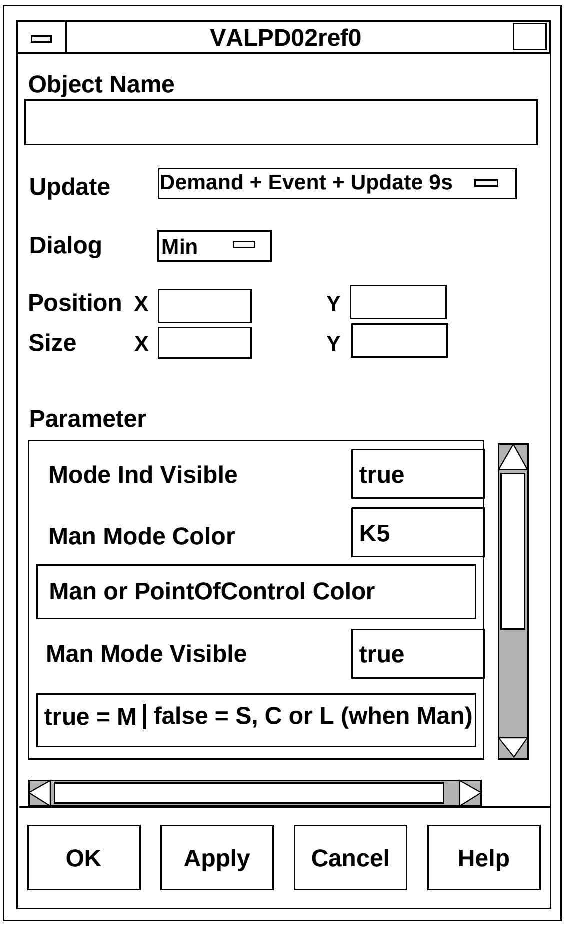
Table 2-1. Parameter list for AIPD51

Parameters	**Affects**	**Options (bold is default)**	**Remarks**
NormalColor	3. MV Value	**K5** (Green), any color	*Color of the bargraph*
TopLeftColor	1.2 TopLeftEdge	**N13** (Grey), any color	*Regarding the choice of the color*
BottomRightColor	1.3 BottomRightEdge	**N13** (Grey), any color	*it will be three dimension effect*
FrameColor	1.1 SelectFrame	**K16** (Black), any color	
FrameWidth	1.1 SelectFrame	**2,** (1.4)	
BarBackColor	3. MV Value	**K16** (Black), any color	*Background color of the bargraph*
LimitColor	4. High Limit 2, 5. High Limit1, 6. Low Limit 1 and 7. Low Limit 2	**M16** (Grey), any color	*Default color of the limits arrows*

If you want the default parameters given in the configuration dialog box you just have to click on the **OK** or **Apply** button. If you want to change a value you click in the name field, delete what is written and enter a new value before clicking on the **OK** or **Apply** button.

2.3 Application Procedures

When a display element is placed in the workspace you are able to specify attributes for its presentation and dialog. The modifications are only valid for the selected display element(s) in that specific display. The display elements in the libraries can not be changed. The configuration dialog box is displayed when the display element is selected:


VALPD02ref0

Object Name

Update: Demand + Event + Update 9s

Dialog: Min

Position X Y

Size X Y

Parameter

Mode Ind Visible: true

Man Mode Color: K5

Man or PointOfControl Color

Man Mode Visible: true

true = M | false = S, C or L (when Man)

Figure 2-2. Example of a configuration dialog box

Object name

You type the name of the object that shall be controlled by the display element.

Update

The display elements have a default updating time. You can change the updating time by pressing the mouse button on the Update button. An option menu with predefined alternatives is displayed. Release the mouse button on the desired alternative.
Following alternatives are available:

- Demand
- Demand + Event
- Demand + Event + Update 9 seconds (default for process displays)
- Demand + Event + Update 3 seconds.

NOTE

An updating time of 3 seconds is usually not necessary.

Dialog

There are two levels of the process dialog, the Min dialog and the Max dialog level.

With the **Min dialog,** an operator can execute the commands that are necessary during normal operation. The **Max dialog** contains further control possibilities such as changing of limit values, blocking of alarm handling and so on. The dialog levels are controlled by the authority key in the keyboard.

The display elements have Min dialog as default. You can change the dialog by pressing the mouse button on the **Dialog** button. An option menu with predefined alternatives is displayed. Release the mouse button on the desired alternative. Following alternatives are available:

- Max
- Min (default)
- Nil
- User.

If the max dialog for the object is always requested, you select the **Max** alternative in the menu.

If no dialog is requested you select **Nil** in the menu.

If a user defined dialog is requested, you select **User** in the menu. Click the mouse button in the displayed input field and type the dialog name.

The process dialogs for each object type are listed in chapter 4.

Position

X and Y axes coordinates for the display element are indicated in this field and can be changed. The zero reference point is the lower left corner in the workspace. Dragging a display element to a new position automatically updates the X and Y coordinates.

Size

Default values are those you get when you position the display element in the workspace.
The size is stated here in X and Y coordinates and can be modified.

Configurable parameters

The configurable parameters of the display element are displayed. All parameters have a default value. You can modify a value by entering the desired value in the textfield.

All configurable parameters and their admitted values are listed in the tables in chapter 4.

Chapter 3 Operation

3.1 Operating Overview

3.1.1 Display Element

The display designer decides how a process signal or a process object is to be presented in a display by selecting a suitable display element from a library in the system.

The display elements show the status of the signals and objects using symbols and color coding. Independent of the display element type some predefined colors are recommended to represent the status shown in the table below.

The colors have a certain priority order. They are listed with the highest priority first, that is a flashing red color, which means an unacknowledged alarm, has the highest priority.

Table 3-1. Status colors

Color	Description
Red flash	Unacknowledged alarm
Yellow	Blocked input/output/commands
Red	Process/signal error

Figure 3-1. Status indication colors

Color	Description
White frame	Selected
Yellow B or dotted line	Alarm blocked
Yellow Bx	Alarm period blocked
Yellow P	Print blocked

Table 3-2. Type colors

Color	Description
Green	Default and measured value
Cyan	Setpoint, Ratio, DO and AO in Manual mode
Magenta	Output, DO and AO in Auto mode
Blue	Actuator
Beige	Deviation

Table 3-3. Static colors

Color	Description
Grey	Support info, e.g. labels
Dark grey	Background

Each object type can be represented in different display elements depending on which type of display that shall be used. There is, for example, one display element suitable for a group display and there are display elements suitable for user defined process displays. Each display element is described in tables in Chapter 4.

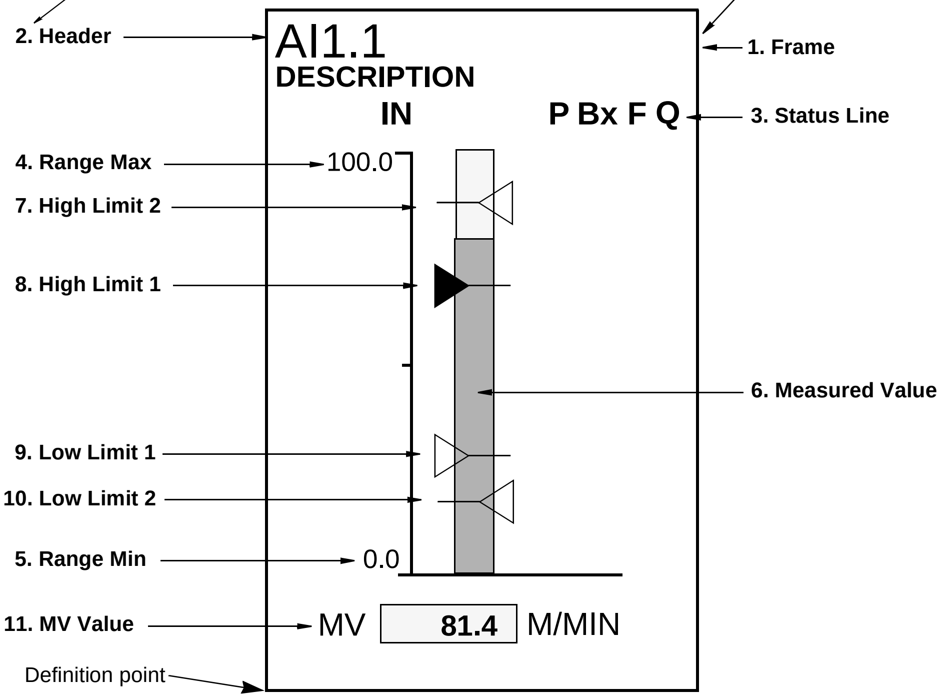
The example below shows a part of the table for AIGR01.

Behavior:

No	Description	Presentation	Condition	Remarks
1	**Select Frame**	White	SELECTED = 1	*Object select frame*
		Black	-	
2	**Header**		NAME and DESCR	*Object Name and Description*
		Red flashing	AL_UNACK = 1	*Unacknowledged*
		Yellow	BLOCKED = 1	*Input blocked*
		Red	DISTURB or ERR = 1	*Alarm*
		Green	-	*Normal*

The indices correspond to the figure below

The display element gets a white frame when selected.



The name and description turns red in case of an signal error or a process alarm. Before the alarm has been acknowledged by the operator the red color is flashing. If the input signal from the data base is blocked the name and description is yellow. These conditions correspond to the properties in the data base element for the object, in this case ERROR, DISTURBANCE, ALARM_UNACK and UPD_BLK. These are shown in the **Condition** column. This column is of minor interest for the operator. However in the **Remark** column the operator can find useful information.

3.1.2 Dialog

For each object type a repertoire of executable operations, called process dialog, is available. The process dialog contains two levels:

- Min dialog
- Max dialog.

The min dialog can execute commands that are necessary during normal operation, such as increase/decrease, start/stop, acknowledge alarm. The max dialog, which requires authority key, contains further control possibilities, such as changing of limit values, blocking of alarm handling and so on.

Chapter 4 contains for each object type the name of the dialog, the dynamic function keys and keyboard keys used by the dialog as well as a table showing the function of each key and which properties in the data base, the data base element, it affects.

The example below shows the process dialog for an analog input signal.

Keyboard Keys.

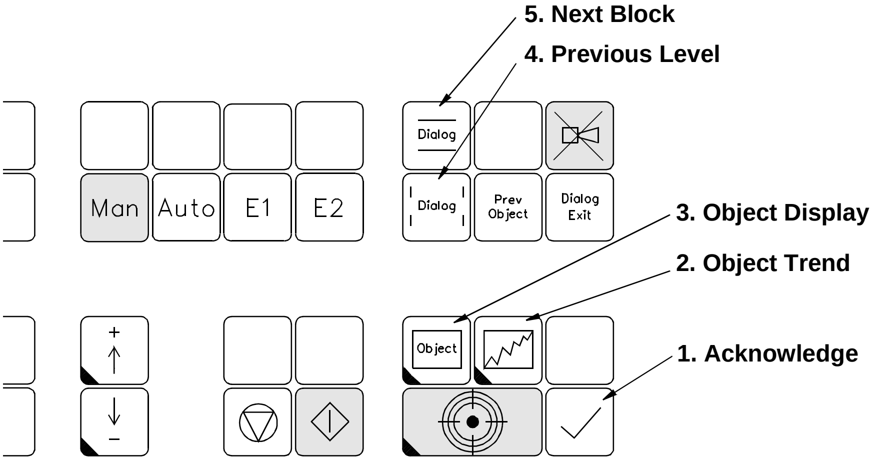


Figure 3-2. Keyboard keys

Min dialog

Dynamic keys, Keyboard

D1	D2	D3	D4	D5
D6	D7 Acknowledge	D8 Object Display	D9 Object Trend	D10

Figure 3-3. Dynamic keys, Keyboard

Max dialog (Authority key)

Dynamic keys, Top Level

D1 Block Input	D2 Block Alarm	D3 Block Printout	D4	D5 Limits...
D6 Deblock Input	D7 Deblock Alarm	D8 Deblock Printout	D9	D10 Keyboard...

Figure 3-4. Dynamic keys, Top Level

Dynamic keys, Limits

D1 H1	D2 H2	D3	D4	D5
D6 L1	D7 L2	D8	D9 Alarm Delay	D10

Figure 3-5. Dynamic keys, Limits

Dynamic keys, Keyboard

D1	D2	D3	D4	D5
D6	D7 Acknowledge	D8 Object Display	D9 Object Trend	D10

Figure 3-6. Dynamic keys, Keyboard

Chapter 4 Display Elements

4.1 Process Dialog for Analog Input AI

4.1.1 MIN Dialog (No authority key)

4.1.1.1 Keyboard keys

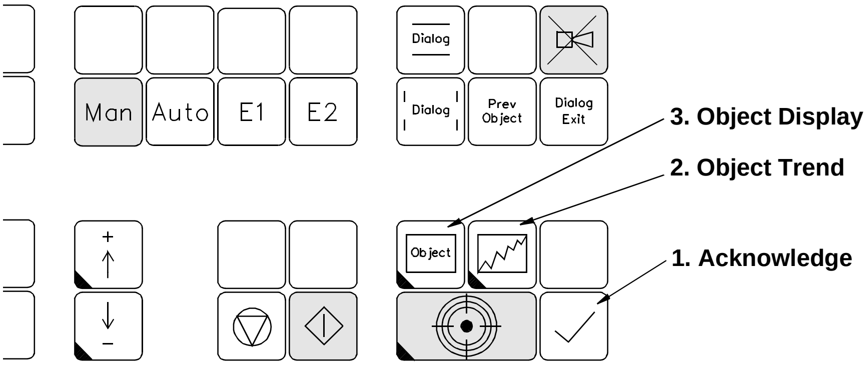


Figure 4-1. Keyboard keys

Key 1: Acknowledge	Perform: Acknowledge	AL_UNACK = 0
Key 2: Object Trend	Select: Object Trend	
Key 3: Object Display	Select: Object Display	

4.1.1.2 Command line

Dialog for changing MV:	Perform: Change Measured value If Input Blocked - BLOCKED = 1	VALUE

4.1.1.3 Dynamic keys, Keyboard

D1	D2	D3	D4	D5
D6	D7 Acknowledge	D8 Object Display	D9 Object Trend	D10

Figure 4-2. Dynamic keys

D7: Acknowledge	Perform: Acknowledge	AL_UNACK = 0
D8: Object Display	Select: Object Display	
D9: Object Trend	Select: Object Trend	

4.1.2 MAX Dialog (Authority key)

4.1.2.1 Keyboard keys

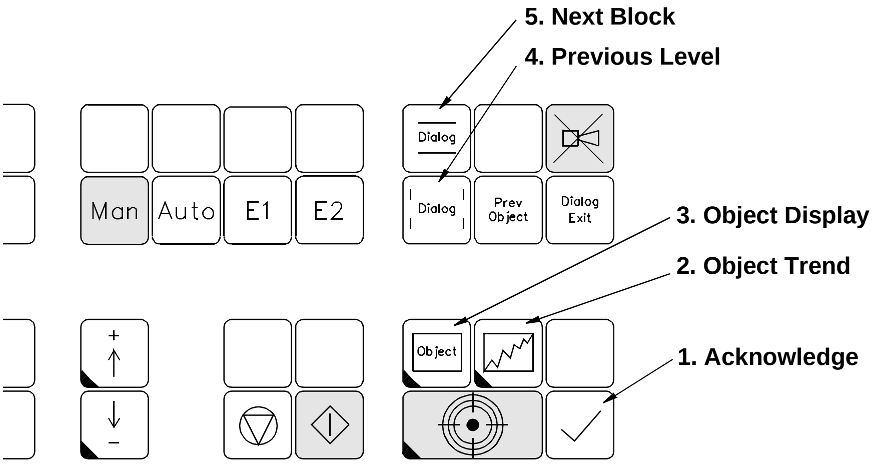


Figure 4-3. Keyboard keys

Key 1: Acknowledge	Perform: Acknowledge	AL_UNACK = 0
Key 2: Object Trend	Select: Object Trend	
Key 3: Object Display	Select: Object Display	
Key 4: Previous Level	Select Dynamic keys: Top Level	
Key 5: Next Block	Page between the dynamic key sets: Limits and Keyboard	

4.1.2.2 Command line

Dialog for changing MV:	Perform: Change Measured value If Input Blocked - BLOCKED = 1	VALUE

4.1.2.3 Dynamic keys, Top Level

D1 Block Input	D2 Block Alarm	D3 Block Printout	D4	D5 Limits...
D6 Deblock Input	D7 Deblock Alarm	D8 Deblock Printout	D9	D10 Keyboard...

Figure 4-4. Dynamic keys

D1: Block Input	Pressed: yellow text Released: white text	BLOCKED = 1
D2: Block Alarm	Pressed: yellow text Released: white text	AL_BLK = 1
D3: Block Printout	Pressed: yellow text Released: white text	PR_BLK = 1
D5: Limits...	Select Dynamic keys: Limits	
D6: Deblock Input	Pressed: green text Released: white text	BLOCKED = 0
D7: Deblock Alarm	Pressed: green text Released: white text	AL_BLK = 0
D8: Deblock Printout	Pressed: green text Released: white text	PR_BLK = 0
D10: Keyboard...	Select Dynamic keys: Keyboard	

4.1.2.4 Dynamic keys, Keyboard

D1	D2	D3	D4	D5
D6	D7 Acknowledge	D8 Object Display	D9 Object Trend	D10

Figure 4-5. Dynamic keys

D7: Acknowledge	Perform: Acknowledge	AL_UNACK = 0
D8: Object Display	Select: Object Display	
D9: Object Trend	Select: Object Trend	

4.1.2.5 Dynamic keys, Limits

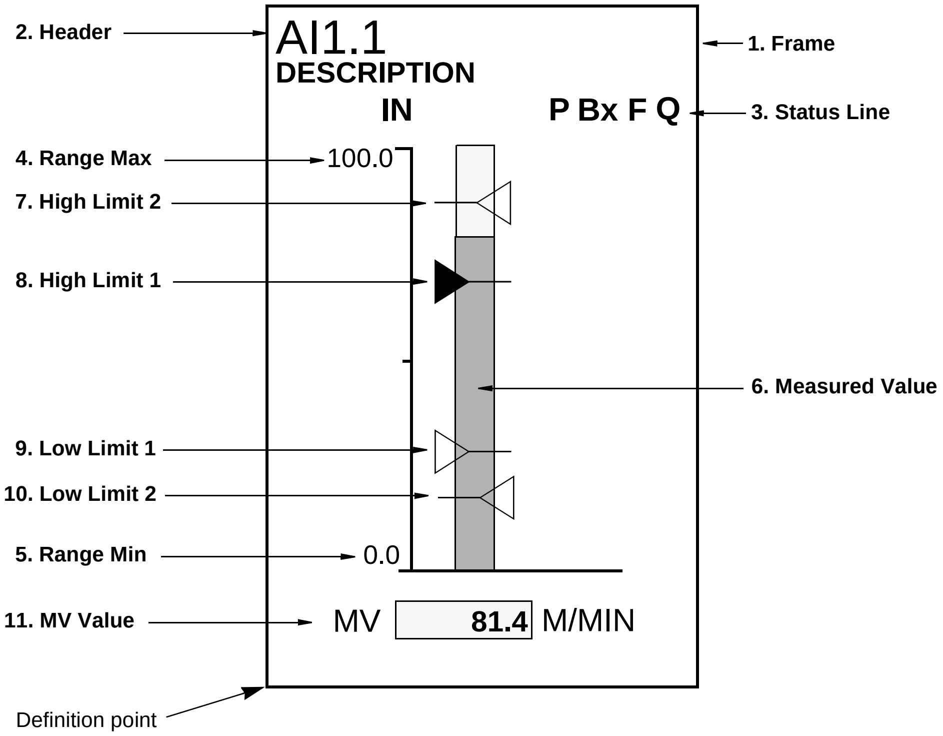
D1 H1 70.00	D2 H2 80.00	D3	D4	D5
D6 L1 45.00	D7 L2 35.00	D8	D9 Alarm Delay	D10

Figure 4-6. Dynamic keys

D1: H1	Pressed: Dialog for changing High Limit 1. High Limit 1 value green, If EN_H1 = 1 then key is dimmed	HI_LIM1
D2: H2	Pressed: Dialog for changing High Limit 2. High Limit 2 value green, If EN_H2 = 1 then key is dimmed	HI_LIM2
D6: L1	Pressed: Dialog for changing Low Limit 1. Low Limit 1 value green, If EN_L1 = 1 then key is dimmed	LO_LIM1
D7: L2	Pressed: Dialog for changing Low Limit 2. Low Limit 2 value green, If EN_L2 = 1 then key is dimmed	LO_LIM2
D9: Alarm Delay	Pressed: Dialog for changing Alarm Delay	AL_DELAY

4.1.3 AIGR01

Presentation:



Behavior:

No	Description	Presentation	Condition	Remarks
1	**Select Frame**	White	SELECTED = 1	*Object select frame*
		Black	-	
2	**Header**		NAME and DESCR	*Object Name and Description*
		Red flashing	AL_UNACK = 1	*Unacknowledged*
		Yellow	BLOCKED = 1	*Input blocked*
		Red	DISTURB = 1 or ERR = 1	*Alarm*
		Green	-	*Normal*
3	**Status Line**			*Status Line*
3.1	**Input Blocked**	**IN** Yellow	BLOCKED = 1	*Input blocked*
3.2	**Printout Blocked**	**P** Yellow	PR_BLK = 1	*Printout blocked*
3.3	**Alarm Blocked**	**B** Yellow	AL_BLK = 1	*Alarm blocked by operator*
		Bx Yellow	AL_P_BLK = 1	*Alarm blocked by PC-program*
3.4	**Alarm Indication**	**F** Red	DISTURB = 1	*Alarm*
3.5	**Error Indication**	**Q** Red	ERR = 1	*I/O Error*

No	Description	Presentation	Condition	Remarks
4	**Range Max**		RANGEMAX	*Range Max of the MV value*
		Green	-	
5	**Range Min**		RANGEMAX	*Range Min of the MV value*
		Green	-	
6	**Measured Value Bargraph**		VALUE	*Object measured value*
		Green	-	
7	**High Limit 2**		HI_LIM2	*Alarm High limit 2*
	—◁	-	HI_LIM2 >= RANGEMAX or EN_H2 = 0	*Invisible*
		Filled Yellow	VALUE>H2 = 1 and AL_BLK = 1	
		Unfilled Yellow	AL_BLK = 1	
		Filled Red	VALUE>H2 = 1	
		Unfilled Grey	-	
8	**High Limit 1**		HI_LIM1	*Warning High limit 1*
	▷—	-	HI_LIM1 >= RANGEMAX or EN_H1 = 0	*Invisible*
		Filled Yellow	VALUE>H1 = 1 and AL_BLK = 1	
		Unfilled Yellow	AL_BLK = 1	
		Filled Red	VALUE>H1 = 1	
		Unfilled Grey	-	
9	**Low Limit 1**		LO_LIM1	*Warning Low limit 1*
	▷—	-	LO_LIM1 <= RANGEMIN or EN_L1 = 0	*Invisible*
		Filled Yellow	VALUE<L1 = 1 and AL_BLK = 1	
		Unfilled Yellow	AL_BLK = 1	
		Filled Red	VALUE<L1 = 1	
		Unfilled Grey	-	
10	**Low Limit 2**		LO_LIM2	*Alarm Low limit 2*
	—◁	-	LO_LIM2 <= RANGEMIN or EN_L2 = 0	*Invisible*
		Filled Yellow	VALUE<L2 = 1 and AL_BLK = 1	
		Unfilled Yellow	AL_BLK = 1	
		Filled Red	VALUE<L2 = 1	
		Unfilled Grey	-	

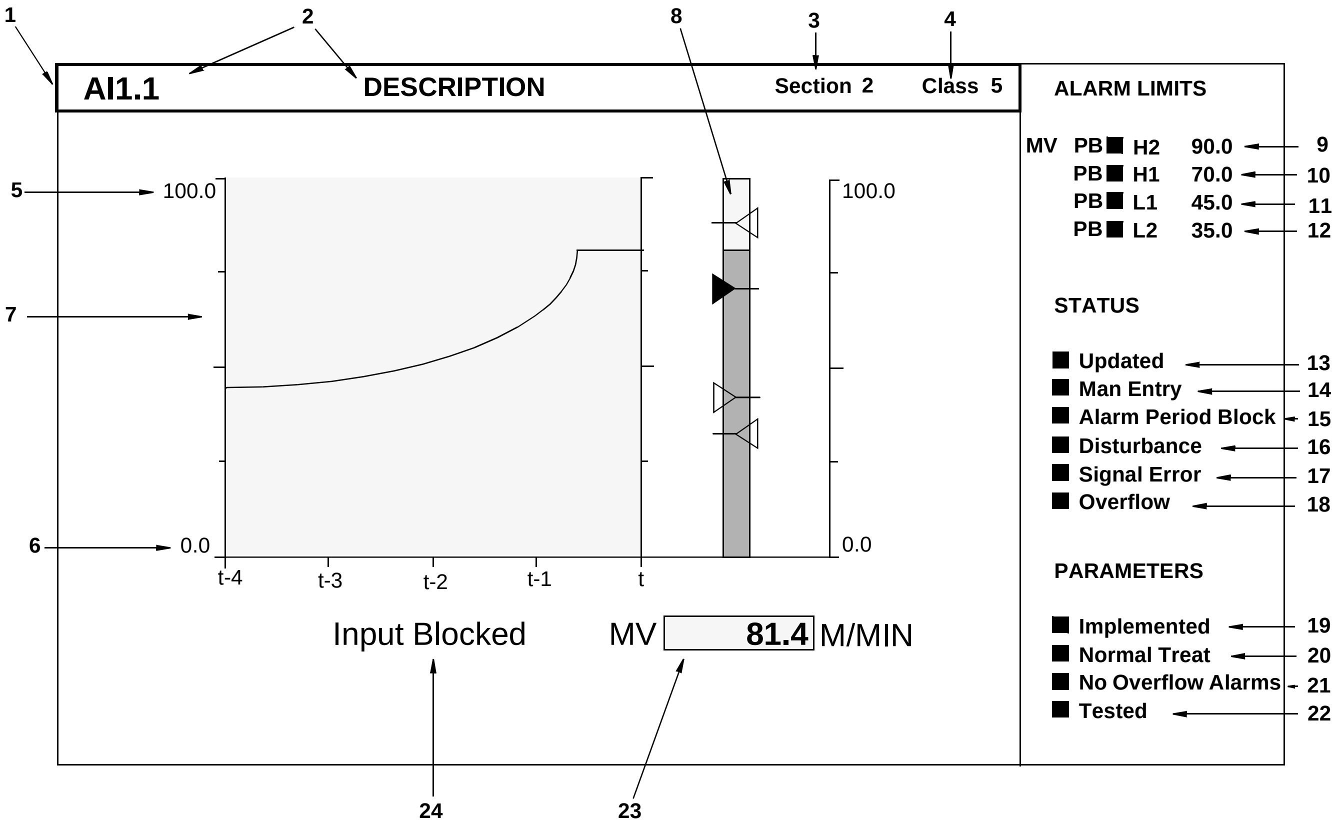
No	Description	Presentation	Condition	Remarks
11	**Measured Value**			*The MV object value*
11.1	**MV**	**MV** Grey		*Text in front of the value*
11.2	**MV Value**	**? ? ?** Red	ERR = 1	*I/O Error*
		Green	VALUE	*Measured value*
11.3	**MV Unit**		UNIT	*Measured unit*
		Green	-	

Configuration:

Parameters	Affects	Options (bold is default)	Remarks
NameFont	2. Header Name	**FC50**, any font	

4.1.4 AIOB01

Presentation:



Behavior:

No	Description	Presentation	Condition	Remarks
1	**Select Frame**	White	SELECTED = 1	*Object select frame*
		Black	-	
2	**Header**		NAME and DESCR	*Object Name and Description*
		Red flashing	AL_UNACK = 1	*Unacknowledged*
		Yellow	BLOCKED = 1	*Input blocked*
		Red	DISTURB = 1 or ERR = 1	*Alarm*
		Green	-	*Normal*
3.1	**Section Text**	**Section** Grey		*Text in front of the value*
3.2	**Section Value**	Green	PROC_SEC	*Process section*
4.1	**Class Text**	**Class** Grey		*Text in front of the value*
4.2	**Class Value**	Green	CLASS	*Object class*

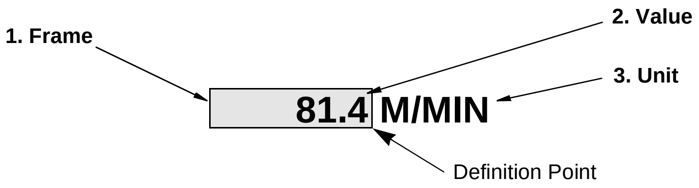
No	Description	Presentation	Condition	Remarks
5	**Range Max**		RANGEMAX	*Range Max of the MV value*
		Green	-	
6	**Range Min**		RANGEMAX	*Range Min of the MV value*
		Green	-	
7	**Measured Value Trim Curve**		VALUE	*Object value - Trim curve*
		Green	-	
8.1	**Measured Value Bargraph**		VALUE	*Object measured value*
		Green	-	
8.2	**High Limit 2**		HI_LIM2	*Alarm High limit 2*
	—◁	-	HI_LIM2 >= RANGEMAX or EN_H2 = 0	*Invisible*
		Filled Yellow	VALUE>H2 = 1 and AL_BLK = 1	
		Unfilled Yellow	AL_BLK = 1	
		Filled Red	VALUE>H2 = 1	
		Unfilled Grey	-	
8.3	**High Limit 1**		HI_LIM1	*Warning High limit 1*
	▷—	-	HI_LIM1 >= RANGEMAX or EN_H1 = 0	*Invisible*
		Filled Yellow	VALUE>H1 = 1 and AL_BLK = 1	
		Unfilled Yellow	AL_BLK = 1	
		Filled Red	VALUE>H1 = 1	
		Unfilled Grey	-	
8.4	**Low Limit 1**		LO_LIM1	*Warning Low limit 1*
	▷—	-	LO_LIM1 <= RANGEMIN or EN_L1 = 0	*Invisible*
		Filled Yellow	VALUE<L1 = 1 and AL_BLK = 1	
		Unfilled Yellow	AL_BLK = 1	
		Filled Red	VALUE<L1 = 1	
		Unfilled Grey	-	
8.5	**Low Limit 2**		LO_LIM2	*Alarm Low limit 2*
	—◁	-	LO_LIM2 <= RANGEMIN or EN_L2 = 0	*Invisible*
		Filled Yellow	VALUE<L2 = 1 and AL_BLK = 1	
		Unfilled Yellow	AL_BLK = 1	
		Filled Red	VALUE<L2 = 1	
		Unfilled Grey	-	

No	Description	Presentation	Condition	Remarks
9	**ALARM LIMITS for MV**			*Alarm limits for MV*
9.1	**Printout Blocked**	**P** Yellow	PR_BLK = 1	*Printout blocked*
9.2	**Alarm Blocked**	**B** Yellow	AL_BLK = 1	*Alarm blocked by operator*
		Bx Yellow	AL_P_BLK = 1	*Alarm blocked by PC-program*
9.3	**Alarm Indication**	■ Red	VALUE>H2 = 1	*Alarm High limit 2*
9.4	**H2 Text**	**H2** Grey		*Text in front of the value*
9.5	**H2 Value**	Green	HI_LIM2	*High limit 2 value*
		-	EN_H2 = 0	*Invisible*
10.1	**Printout Blocked**	**P** Yellow	PR_BLK = 1	*Printout blocked*
10.2	**Alarm Blocked**	**B** Yellow	AL_BLK = 1	*Alarm blocked by operator*
		Bx Yellow	AL_P_BLK = 1	*Alarm blocked by PC-program*
10.3	**Alarm Indication**	■ Red	VALUE>H1 = 1	*Warning High limit 1*
10.4	**H1 Text**	**H1** Grey		*Text in front of the value*
10.5	**H1 Value**	Green	HI_LIM1	*Warning High limit 1 value*
		-	EN_H1 = 0	*Invisible*
11.1	**Printout Blocked**	**P** Yellow	PR_BLK = 1	*Printout blocked*
11.2	**Alarm Blocked**	**B** Yellow	AL_BLK = 1	*Alarm blocked by operator*
		Bx Yellow	AL_P_BLK = 1	*Alarm blocked by PC-program*
11.3	**Alarm Indication**	■ Red	VALUE<L1 = 1	*Warning Low limit 1*
11.4	**L1 Text**	**L1** Grey		*Text in front of the value*
11.5	**L1 Value**	Green	LO_LIM1	*Warning Low limit 1 value*
		-	EN_L1 = 0	*Invisible*
12.1	**Printout Blocked**	**P** Yellow	PR_BLK = 1	*Printout blocked*
12.2	**Alarm Blocked**	**B** Yellow	AL_BLK = 1	*Alarm blocked by operator*
		Bx Yellow	AL_P_BLK = 1	*Alarm blocked by PC-program*
12.3	**Alarm Indication**	■ Red	VALUE<L2 = 1	*Alarm Low limit 2*
12.4	**L2 Text**	**L2** Grey		*Text in front of the value*
12.5	**L2 Value**	Green	LO_LIM2	*Alarm Low limit2 value*
		-	EN_L2 = 0	*Invisible*

No	Description	Presentation	Condition	Remarks
13	**STATUS**			*Status*
13.1	**Updated Indication**	■ Green	UPDATED = 1	*Updated*
13.2	**Updated text**	**Updated** Grey		*Updated text*
14.1	**Manual entry Indication**	■ Green	MAN_ENTR = 1	*Manual entry flag*
14.2	**Manual entry text**	**Man Entry** Grey		
15.1	**Alarm period block Indication**	■ Yellow	AL_P_BLK = 1	*Alarm blocked by PC-program*
15.2	**Alarm period block text**	**Alarm Period Blk**		*Text behind the indication*
		Yellow	AL_P_BLK = 1	
		Grey	-	
16.1	**Disturbance Indication**	■ Red	DISTURB = 1	*Fault*
16.2	**Disturbance text**	**Disturbance**		*Text behind the indication*
		Red	DISTURB = 1	
		Grey	-	
17.1	**Signal error Indication**	■ Red	ERR = 1	*I/O Error*
17.2	**Signal error text**	**Signal Error**		*Text behind the indication*
		Red	ERR = 1	
		Grey	-	
18.1	**Overflow Indication**	■ Red	OVERFLOW = 1	*Overflow*
18.2	**Overflow text**	**Overflow**		*Text behind the indication*
		Red	OVERFLOW = 1	
		Grey	-	
19	**PARAMETERS**			*Parameters*
19.1	**Implemented Indication**	■ Green	ACT = 1	*Implemented*
19.2	**Implemented text**	**Implemented** Grey		*Implemented text*
20.1	**Normal treat Indication**	■ Green	NORM_TR = 1	*Normal object treat*
20.2	**Normal treat text**	**Normal Treated** Grey		*Normal object treat text*
21.1	**No overflow Indication**	■ Green	OVF_CTRL = 1	*No error at overflow*
21.2	**No overflow text**	**No Overflow** Grey		*No error at overflow text*
22.1	**Tested Indication**	■ Green	TESTED = 1	*Tested*
22.2	**Tested text**	**Tested** Grey		*Tested text*
23.1	**MV Text**	**MV** Grey		*Text in front of the value*
23.2	**MV Value**	**? ? ?** Red	ERR = 1	*I/O Error*
		Green	VALUE	*Measured value*
23.3	**MV Unit**	Green	UNIT	*Measured unit*
24	**Input Blocked**	**Input Blocked** Yellow	BLOCKED = 1	*Input blocked*
		-	BLOCKED = 0	*Invisible*

4.1.5 AIPD01

Presentation:



Behavior:

No	Description	Presentation	Condition	Remarks
1	**Select Frame**	White	SELECTED = 1	*Object select frame*
		Dotted Yellow	AL_BLK = 1	*Alarm blocked by operator*
		Black	-	FrameColor
2	**Measured Value**		VALUE	*Object value*
		? ? ? Red flashing	ERR = 1 and AL_UNACK = 1	*Unacknowledged I/O Error*
		Red flashing	AL_UNACK = 1	*Unacknowledged alarm*
		? ? ? Red	ERR = 1	*I/O Error*
		Yellow	BLOCKED =1	*Input blocked*
		Red	DISTURB = 1	*Alarm*
		Green	-	NormalColor
3	**Unit**		UnitVisible = onRequest	*Object unit*
		Green	UNIT	NormalColor
		-	UnitVisible = noSubscription	*Unit is invisible*

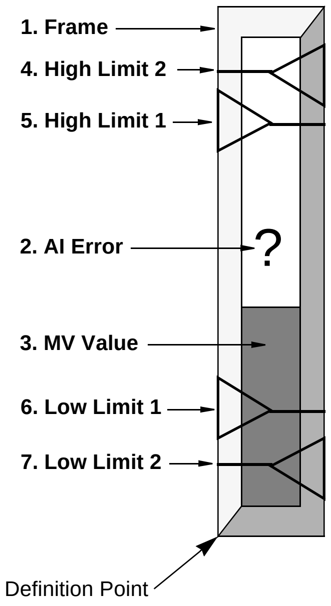
The conditions are in priority order. Underlined parameters are configurable.

Configuration:

Parameters	Affects	Options (bold is default)	Remarks
UnitVisible	3. Unit	**onRequest**, noSubscription	
NormalColor	2. Measured Value and 3. Unit	**K5** (Green), any color	
Font	2. Measured Value and 3. Unit	**FA40**, any font	
SelectAreaColor	1. SelectArea	**K16** (Black), any color	*Background color and deletion color*
FrameColor	1. SelectFrame	**K16** (Black), any color	*mostly = SelectAreaColor*
FrameWidth	1. SelectFrame	**2**, (1..4)	
NumberOfChar	2. Measured Value	**7**	*Including* **.** *and* **-**

4.1.6 AIPD51

Presentation:



Behavior:

No	Description	Presentation	Condition	Remarks
1.1	**SelectFrame**	White	SELECTED = 1	*Object select frame*
		Black	-	FrameColor
1.2	**TopLeftEdge**			*Three Dimensions effect*
		Grey		TopLeftColor
1.3	**BottomRightEdge**			*Three Dimensions effect*
		Grey		BottomRightColor
2	**AI Error**	**?** Red flashing	ERR = 1 and AL_UNACK = 1	*Unacknowledged*
		? *Yellow*	ERR = 1 and BLOCKED = 1	*Input blocked*
		? Red	ERR = 1	*I/O Error*
		-	ERR = 0	*Invisible*

No	Description	Presentation	Condition	Remarks
3	**MV Value**		VALUE	*The object value*
		-	ERR = 1	*Invisible - I/O Error*
		Red flashing	AL_UNACK = 1	*Unacknowledged*
		Yellow	BLOCKED = 1	*Input blocked*
		Red	DISTURB = 1	*Alarm*
		Green	-	NormalColor
4	**High Limit 2**		HI_LIM2	*Alarm High limit 2*
	—◁	-	HI_LIM2 >= RANGEMAX or EN_H2 = 0	*Invisible*
		Filled Yellow	VALUE>H2 = 1 and AL_BLK = 1	
		Unfilled Yellow	AL_BLK = 1	
		Filled Red	VALUE>H2 = 1	
		Unfilled Grey	-	LimitColor
5	**High Limit 1**		HI_LIM1	*Warning High limit 1*
	▷—	-	HI_LIM1 >= RANGEMAX or EN_H1 = 0	*Invisible*
		Filled Yellow	VALUE>H1 = 1 and AL_BLK = 1	
		Unfilled Yellow	AL_BLK = 1	
		Filled Red	VALUE>H1 = 1	
		Unfilled Grey	-	LimitColor
6	**Low Limit 1**		LO_LIM1	*Warning Low limit 1*
	▷—	-	LO_LIM1 <= RANGEMIN or EN_L1 = 0	*Invisible*
		Filled Yellow	VALUE<L1 = 1 and AL_BLK = 1	
		Unfilled Yellow	AL_BLK = 1	
		Filled Red	VALUE<L1 = 1	
		Unfilled Grey	-	LimitColor
7	**Low Limit 2**		LO_LIM2	*Alarm Low limit 2*
	—◁	-	LO_LIM2 <= RANGEMIN or EN_L2 = 0	*Invisible*
		Filled Yellow	VALUE<L2 = 1 and AL_BLK = 1	
		Unfilled Yellow	AL_BLK = 1	
		Filled Red	VALUE<L2 = 1	
		Unfilled Grey	-	LimitColor

The conditions are in priority order. Underlined parameters are configurable.

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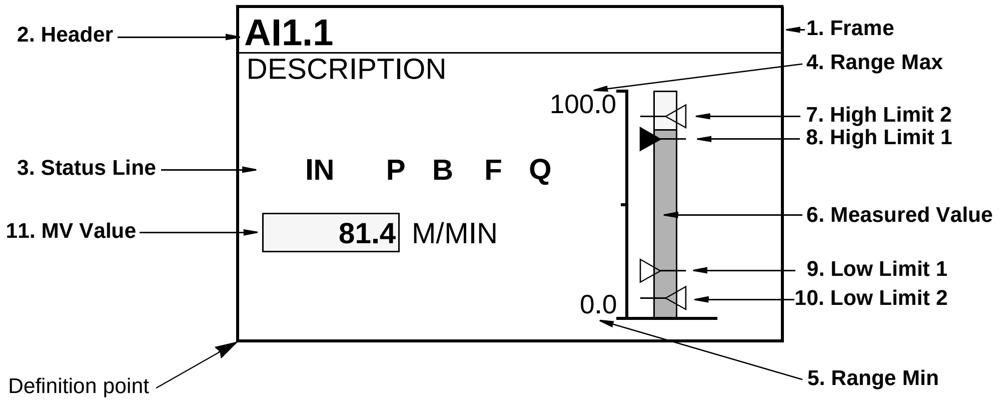
Configuration:

Parameters	Affects	Options (bold is default)	Remarks
NormalColor	3. MV Value	**K5** (Green), any color	*Color of the bargraph*
TopLeftColor	1.2 TopLeftEdge	**N13** (Grey), any color	*Regarding the choice of the color it will be three dimension effect*
BottomRightColor	1.3 BottomRightEdge	**N13** (Grey), any color	
FrameColor	1.1 SelectFrame	**K16** (Black), any color	
FrameWidth	1.1 SelectFrame	**2**, (1..4)	
BarBackColor	3. MV Value	**K16** (Black), any color	*Background color of the bargraph*
LimitColor	4. High Limit 2, 5. High Limit 1, 6. Low Limit 1 and 7. Low Limit 2	**M16** (Grey), any color	*Default color of the limits arrows*

4.1.7 AIWI01

Presentation:



Behavior:

No	Description	Presentation	Condition	Remarks
1	**Select Frame**			*Object select frame*
		White	SELECTED = 1	*Only for overlap*
		Black	-	
2	**Header**		NAME and DESCR	*Object Name and Description*
		Red flashing	AL_UNACK = 1	*Unacknowledged*
		Yellow	BLOCKED = 1	*Input blocked*
		Red	DISTURB = 1 or ERR = 1	*Alarm*
		Green	-	*Normal*
3	**Status Line**			*Status Line*
3.1	**Input Blocked**	**IN** Yellow	BLOCKED = 1	*Input blocked*
3.2	**Printout Blocked**	**P** Yellow	PR_BLK = 1	*Printout blocked*
3.3	**Alarm Blocked**	**B** Yellow	AL_BLK = 1	*Alarm blocked by operator*
		Bx Yellow	AL_P_BLK = 1	*Alarm blocked by PC-program*
3.4	**Alarm Indication**	**F** Red	DISTURB = 1	*Alarm*
3.5	**Error Indication**	**Q** Red	ERR = 1	*I/O Error*
4	**Range Max**		RANGEMAX	*Range Max of the MV value*
		Green	-	
5	**Range Min**		RANGEMIN	*Range Min of the MV value*
		Green	-	

No	Description	Presentation	Condition	Remarks
6	**Measured Value Bargraph**		VALUE	*Object measured value*
		Green	-	
7	**High Limit 2**		HI_LIM2	*Alarm High limit 2*
	—◁	-	HI_LIM2 >= RANGEMAX or EN_H2 = 0	*Invisible*
		Filled Yellow	VALUE>H2 = 1 and AL_BLK = 1	
		Unfilled Yellow	AL_BLK = 1	
		Filled Red	VALUE>H2 = 1	
		Unfilled Grey	-	
8	**High Limit 1**		HI_LIM1	*Warning High limit 1*
	▷—	-	HI_LIM1 >= RANGEMAX or EN_H1 = 0	*Invisible*
		Filled Yellow	VALUE>H1 = 1 and AL_BLK = 1	
		Unfilled Yellow	AL_BLK = 1	
		Filled Red	VALUE>H1 = 1	
		Unfilled Grey	-	
9	**Low Limit 1**		LO_LIM1	*Warning Low limit 1*
	▷—	-	LO_LIM1 <= RANGEMIN or EN_L1 = 0	*Invisible*
		Filled Yellow	VALUE<L1 = 1 and AL_BLK = 1	
		Unfilled Yellow	AL_BLK = 1	
		Filled Red	VALUE<L1 = 1	
		Unfilled Grey	-	
10	**Low Limit 2**		LO_LIM2	*Alarm Low limit 2*
	—◁	-	LO_LIM2 <= RANGEMIN or EN_L2 = 0	*Invisible*
		Filled Yellow	VALUE<L2 = 1 and AL_BLK = 1	
		Unfilled Yellow	AL_BLK = 1	
		Filled Red	VALUE<L2 = 1	
		Unfilled Grey	-	
11	**Measured Value**			*The MV object value*
11.1	**MV**	**MV** Grey		*Text in front of the value*
11.2	**MV Value**	**? ? ?** Red	ERR = 1	*I/O Error*
		Green	VALUE	*Measured value*
11.3	**MV Unit**		UNIT	*Measured unit*
		Green	-	

4.2 Process Dialog for Analog Output AO

4.2.1 MIN Dialog (No authority key)

4.2.1.1 Keyboard keys

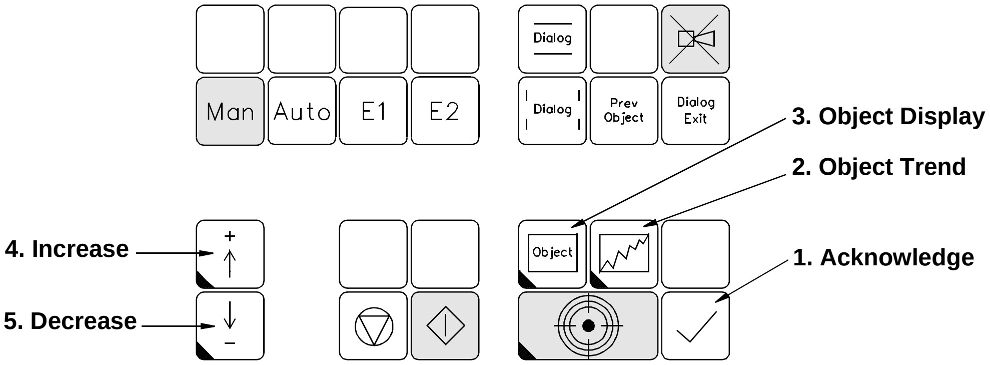


Figure 4-7. Keyboard keys

Key 1: Acknowledge	Perform: Acknowledge	AL_UNACK = 0
Key 2: Object Trend	Select: Object Trend	
Key 3: Object Display	Select: Object Display	
Key 4: Increase	Perform: Increase output value with 1 % if MAN = 1	VALUE
Key 4: Shift + Increase	Perform: Increase output value with 10 % if MAN = 1	VALUE
Key 5: Decrease	Perform: Decrease output value with 1 % if MAN = 1	VALUE
Key 5: Shift + Decrease	Perform: Decrease output value with 10 % if MAN = 1	VALUE

4.2.1.2 Command line

Dialog for changing OUT:	Perform: Change Output value If MAN = 1	VALUE

4.2.1.3 Dynamic keys, Keyboard

D1 ↑ Increase	D2	D3	D4	D5
D6 ↓ Decrease	D7 Acknowledge	D8 Object Display	D9 Object Trend	D10

Figure 4-8. Dynamic keys

D1: Increase	Perform: Increase output value with 1 % if MAN = 1 If MAN = 0 then key is dimmed	VALUE
D6: Decrease	Perform: Decrease output value with 1 % if MAN = 1 If MAN = 0 then key is dimmed	VALUE
D7: Acknowledge	Perform: Acknowledge	AL_UNACK = 0
D8: Object Display	Select: Object Display	
D9: Object Trend	Select: Object Trend	

4.2.2 MAX Dialog (Authority key)

4.2.2.1 Keyboard keys

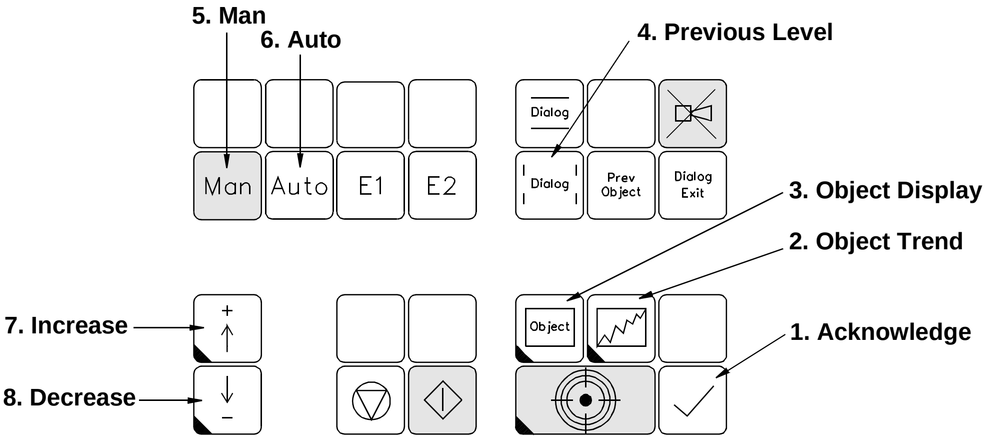


Figure 4-9. Keyboard keys

Key 1: Acknowledge	Perform: Acknowledge	AL_UNACK = 0
Key 2: Object Trend	Select: Object Trend	
Key 3: Object Display	Select: Object Display	
Key 4: Previous Level	Select Dynamic keys: Top Level	
Key 5: Man	Perform: Set to manual mode	MAN = 1
Key 6: Auto	Perform: Set to automatic mode	MAN = 0
Key 7: Increase	Perform: Increase output value with 1 % if MAN = 1	VALUE
Key 7: Shift + Increase	Perform: Increase output value with 10 % if MAN = 1	VALUE
Key 8: Decrease	Perform: Decrease output value with 1 % if MAN = 1	VALUE
Key 8: Shift + Decrease	Perform: Decrease output value with 10 % if MAN = 1	VALUE

4.2.2.2 Command line

Dialog for changing OUT:	Perform: Change Output value If MAN = 1	VALUE

4.2.2.3 Dynamic keys, Top Level

D1 Block Output	D2 OUT H 70.0	D3	D4	D5
D6 Deblock Output	D7 OUT L 30.0	D8	D9	D10 Keyboard...

Figure 4-10. Dynamic keys

D1: Block Output	Pressed: yellow text Released: white text	OUTP_BLK = 1
D2: OUT H	Pressed: Dialog for changing Max Limitation. Max Limitation value magenta, If EN_HI = 1 then key is dimmed	HI_LIM
D6:Deblock Output	Pressed: green text Released: white text	OUTP_BLK = 0
D7: OUT L	Pressed: Dialog for changing Min Limitation. Min Limitation value magenta, If EN_LO = 1 then key is dimmed	LO_LIM
D10:Keyboard...	Select Dynamic keys: Keyboard	

4.2.2.4 Dynamic keys, Keyboard

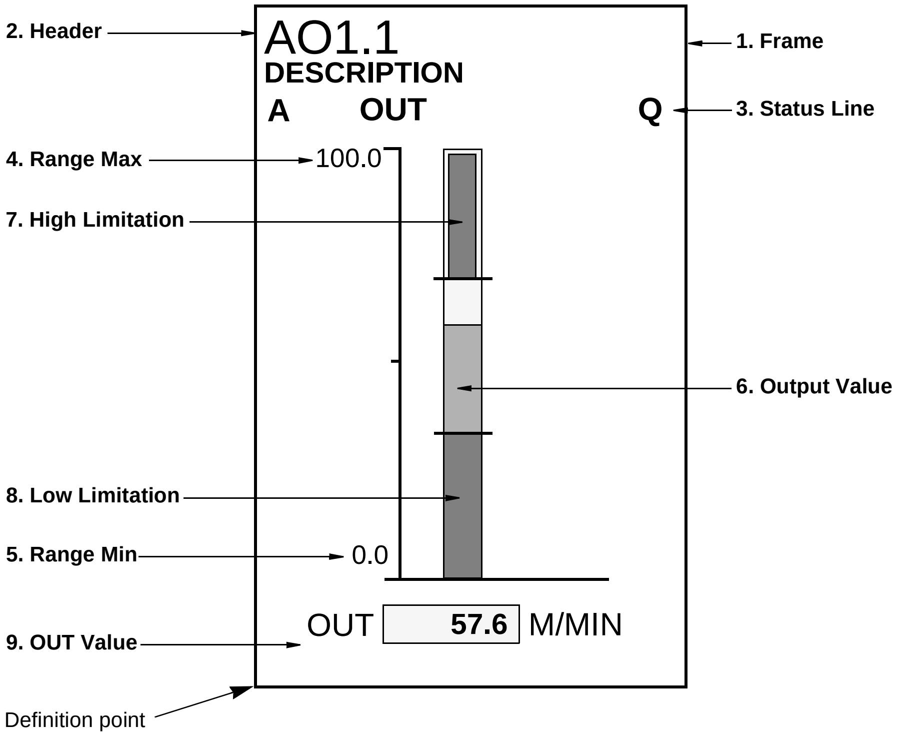
D1 ↑ Increase	D2 Man	D3 Auto	D4	D5
D6 ↓ Decrease	D7 Acknowledge	D8 Object Display	D9 Object Trend	D10

Figure 4-11. Dynamic keys

D1: Increase	Perform: Increase output value with 1 % if MAN = 1 If MAN = 0 then key is dimmed	VALUE
D2: Man	Perform: Set to manual mode	MAN = 1
D3: Auto	Perform: Set to automatic mode	MAN = 0
D6: Decrease	Perform: Decrease output value with 1 % if MAN = 1 If MAN = 0 then key is dimmed	VALUE
D7: Acknowledge	Perform: Acknowledge	AL_UNACK = 0
D8: Object Display	Select: Object Display	
D9: Object Trend	Select: Object Trend	

4.2.3 AOGR01

Presentation:



Behavior:

No	Description	Presentation	Condition	Remarks
1	**Select Frame**	White	SELECTED = 1	*Object select frame*
		Black	-	
2	**Header**		NAME and DESCR	*Object Name and Description*
		Red flashing	AL_UNACK =1	*Unacknowledged*
		Yellow	OUTP_BLK = 1	*Output blocked*
		Red	ERR = 1	*Alarm*
		Cyan	MAN = 1	*Manual mode*
		Magenta	-	*Normal*
3	**Status Line**			*Status Line*
3.1	**Mode**	**M** Cyan	MAN = 1	*Manual mode*
		A Magenta	-	*Auto mode*
3.2	**Output Blocked**	**OUT** Yellow	OUTP_BLK = 1	*Output block*
3.3	**Error Indication**	**Q** Red	ERR = 1	*Signal error*

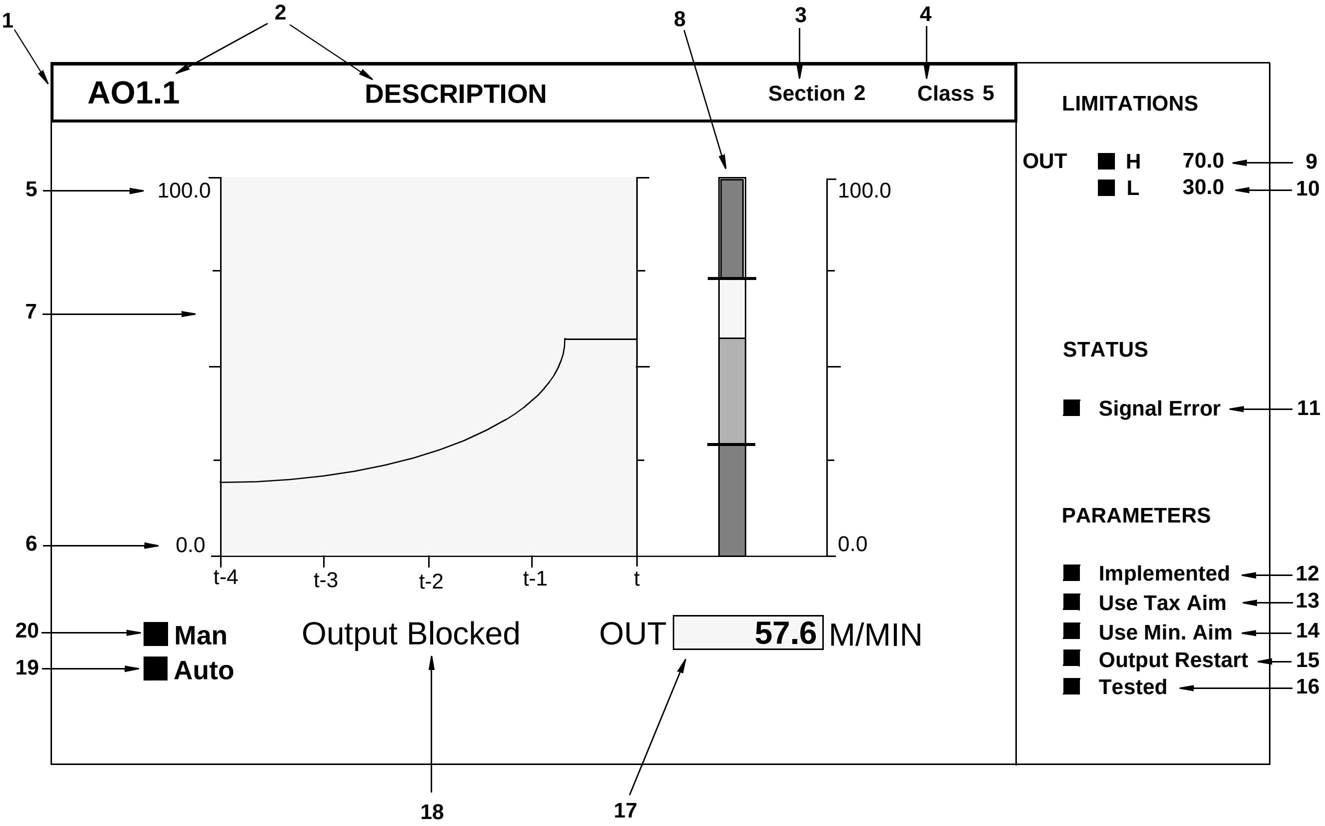
No	Description	Presentation	Condition	Remarks
4	**Range Max**		RANGEMAX	
		Cyan	MAN = 1	*Manual mode*
		Magenta	-	*Auto mode*
5	**Range Min**		RANGEMIN	
		Cyan	MAN = 1	*Manual mode*
		Magenta	-	*Auto mode*
6	**Output Value Bargraph**		VALUE	*Object output value*
		Cyan	MAN = 1	*Manual mode*
		Magenta	-	*Auto mode*
7	**High Limitation**		HI_LIM	*High limitation*
		-	HI_LIM > RANGEMAX or EN_HI = 0	*Invisible*
		Yellow	EN_HI = 1 and VALUE_HI = 1	
		Grey	EN_HI = 1	
8	**Low Limitation**		LO_LIM	*Low limitation*
		-	LO_LIM < RANGEMIN or EN_LO = 0	*Invisible*
		Yellow	EN_LO = 1 and VALUE_LO = 1	
		Grey	EN_LO = 1	
9	**Output Value**			*The Output value*
9.1	**OUT**	**OUT** Grey		*Text in front of the value*
9.2	**OUT Value**		VALUE	
		Cyan	MAN = 1	*Manual mode*
		Magenta	-	*Auto mode*
9.3	**OUT Unit**		UNIT	
		Cyan	MAN = 1	*Manual mode*
		Magenta	-	*Auto mode*

Configuration

Parameters	Affects	Options (bold is default)	Remarks
NameFont	2. Header Name	**FC50**, any font	

4.2.4 AOOB01

Presentation:



Behavior:

No	Description	Presentation	Condition	Remarks
1	**Select Frame**	White	SELECTED = 1	*Object select frame*
		Black	-	
2	**Header**		NAME and DESCR	*Object Name and Description*
		Red flashing	AL_UNACK =1	*Unacknowledged*
		Yellow	OUTP_BLK = 1	*Output blocked*
		Red	ERR = 1	*Alarm*
		Cyan	MAN = 1	*Manual mode*
		Magenta	-	*Normal*
3.1	**Section Text**	**Section** Grey		*Text in front of the value*
3.2	**Section Value**	Green	PROC_SEC	*Process section*
4.1	**Class Text**	**Class** Grey		*Text in front of the value*
4.2	**Class Value**	Green	CLASS	*Object class*

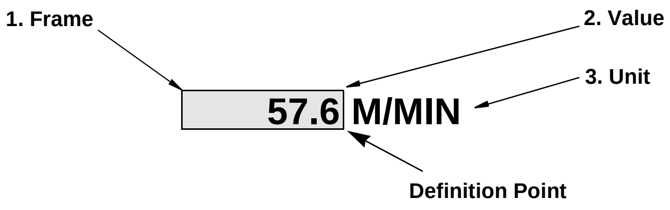
No	Description	Presentation	Condition	Remarks
5	**Range Max**		RANGEMAX	*Range max of the Output value*
		Cyan	MAN = 1	*Manual mode*
		Magenta		*Auto mode*
6	**Range Min**		RANGEMIN	*Range min of the Output value*
		Cyan	MAN = 1	*Manual mode*
		Magenta		*Auto mode*
7	**Output Value Trim Curve**		VALUE	*Object output value*
		Cyan	MAN = 1	*Manual mode*
		Magenta	-	*Auto mode*
8.1	**Output Value Bargraph**		VALUE	*Object output value*
		Cyan	MAN = 1	*Manual mode*
		Magenta	-	*Auto mode*
8.2	**High Limitation**		HI_LIM	*High limitation*
		-	HI_LIM > RANGEMAX or EN_HI = 0	*Invisible*
		Yellow	EN_HI = 1 and VALUE_HI = 1	
		Grey	EN_HI = 1	
8.3	**Low Limitation**		LO_LIM	*Low limitation*
		-	LO_LIM < RANGEMIN or EN_LO = 0	*Invisible*
		Yellow	EN_LO = 1 and VALUE_LO = 1	
		Grey	EN_LO = 1	
9	**LIMITATIONS**			*Limitations for OUT*
9.1	**High Limitation Indication**	■ Yellow	VALUE_HI = 1	*High limitation flag*
9.2	**H Text**	**H** Grey		*Text in front of the value*
9.3	**H Value**		HI_LIM	*High limitation value*
		-	EN_HI = 1 and VALUE_HI = 1	*Invisible*
		Cyan	MAN = 1	*Manual mode*
		Magenta	-	*Auto mode*

No	Description	Presentation	Condition	Remarks
10.1	**Low Limitation Indication**	■ Yellow	VALUE_LO = 1	*Low limitation flag*
10.2	**L Text**	**L** Grey		*Text in front of the value*
10.3	**L Value**		LO_LIM	*Low limitation value*
		-	LO_LIM < RANGEMIN or EN_LO = 0	*Invisible*
		Cyan	MAN = 1	*Manual mode*
		Magenta	-	*Auto mode*
11	**STATUS**			*Status*
11.1	**Signal Error Indication**	■ Red	ERR = 1	*Signal error*
11.2	**Signal Error Text**	**Signal Error**		*Signal error text*
		Red	ERR = 1	
		Grey	-	
12	**PARAMETERS**			*Parameters*
12.1	**Implemented Indication**	■ Green	IMPLEMENTED = 1	*Implemented*
12.2	**Implemented Text**	**Implemented** Grey		*Implemented text*
13.1	**Use Max Limitation Indication**	■ Green	EN_HI = 1	*Use max limitation*
13.2	**Use Max Lim Text**	**Use Max Lim** Grey		*Use max lim text*
14.1	**Use Min Limitation Indication**	■ Green	EN_LO = 1	*Use min limitation*
14.2	**Use Min Lim Text**	**Use Min Lim** Grey		*Use min lim text*
15.1	**Output Restart Indication**	■ Green	RESTART = 1	*Output restart*
15.2	**Output Restart Text**	**Output Restart** Grey		*Output restart text*
16.1	**Tested Indication**	■ Green	TESTED = 1	*Tested*
16.2	**Tested Text**	**Tested** Grey		*Tested text*
17.1	**OUT Text**	**OUT** Grey		*Text in front of the value*
17.2	**OUT Value**		VALUE	
		Cyan	MAN = 1	*Manual mode*
		Magenta	-	*Auto mode*
17.3	**OUT Unit**		UNIT	
		Cyan	MAN = 1	*Manual mode*
		Magenta	-	*Auto mode*
18	**Output Blocked**	**Output Blocked** Yellow	OUTP_BLK = 1	*Output blocked*
		-	OUTP_BLK = 0	*Invisible*

No	Description	Presentation	Condition	Remarks
19.1	**Auto Indication**	■ Magenta	MAN = 0	*Auto mode*
19.2	**Auto Text**	**Auto**		*Auto text*
		Magenta	MAN = 0	*Auto mode*
		Grey	MAN = 1	*Manual mode*
20.1	**Man Indication**	■ Cyan	MAN = 1	*Manual mode*
20.2	**Man Text**	**Man**		*Manual text*
		Cyan	MAN = 1	*Manual mode*
		Grey	MAN = 0	*Auto mode*

4.2.5 AOPD01

Presentation:



Behavior:

No	Description	Presentation	Condition	Remarks
1	**Select Frame**	White	SELECTED = 1	*Object select frame*
		Black	-	FrameColor
2	**Output Value**		VALUE	*Object value*
		Red flashing	AL_UNACK = 1	*Unacknowledged alarm*
		Yellow	OUTP_BLK = 1	*Output blocked*
		Red	ERR = 1	*Alarm*
		Cyan	MAN = 1	ManualColor
		Magenta	-	AutoColor
3	**Unit**		UNIT UnitVisible = onRequest	*Object unit*
		Cyan	MAN = 1	ManualColor
		Magenta	-	AutoColor
		-	UnitVisible = noSubscription	*Unit is invisible*

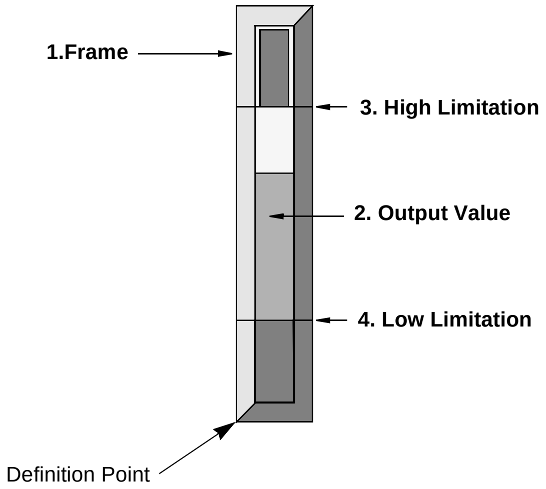
The conditions are in priority order. Underlined parameters are configurable.

Configuration:

Parameters	Affects	Options (bold is default)	Remarks
UnitVisible	3. Unit	**onRequest**, noSubscription	
AutoColor	2. Output Value and 3. Unit	**K11** (Magenta), any color	*Value and unit in auto mode*
ManualColor	2. Output Value and 3. Unit	**K9** (Cyan), any color	*Value and unit in manual mode*
Font	2. Output Value and 3. Unit	**FA40**, any font	
SelectAreaColor	1. SelectArea	**K16** (Black), any color	*Background color and deletion color*
FrameColor	1. SelectFrame	**K16** (Black), any color	*mostly = SelectAreaColor*
FrameWidth	1. SelectFrame	**2**, (1..4**)**	
NumberOfChar	2. Output Value	**7**	*Including . and -*

4.2.6 AOPD51

Presentation:



Behavior:

No	Description	Presentation	Condition	Remarks
1.1	**SelectFrame**	White	SELECTED = 1	*Object select frame*
		Black	-	FrameColor
1.2	**TopLeftEdge**			*Three Dimensions effect*
		Grey		TopLeftColor
1.3	**BottomRightEdge**			*Three Dimensions effect*
		Grey		BottomRightColor
2	**Output Value**		VALUE	*The object value*
		Red flashing	AL_UNACK = 1	*Unacknowledged alarm*
		Yellow	OUTP_BLK =1	*Output blocked*
		Red	ERR = 1	*Alarm*
		Cyan	MAN = 1	ManualColor
		Magenta	-	AutoColor

No	Description	Presentation	Condition	Remarks
3	**High Limitation**		HI_LIM	*High limitation*
		-	HI_LIM > RANGEMAX or EN_HI = 0	*Invisible*
		Yellow	EN_HI = 1 and VALUE_HI = 1	
		Grey	EN_HI = 1	LimitationColor
4	**Low Limitation**		LO_LIM	*Low limitation*
		-	LO_LIM < RANGEMIN or EN_LO = 0	*Invisible*
		Yellow	EN_LO = 1 and VALUE_LO = 1	
		Grey	EN_LO = 1	LimitationColor

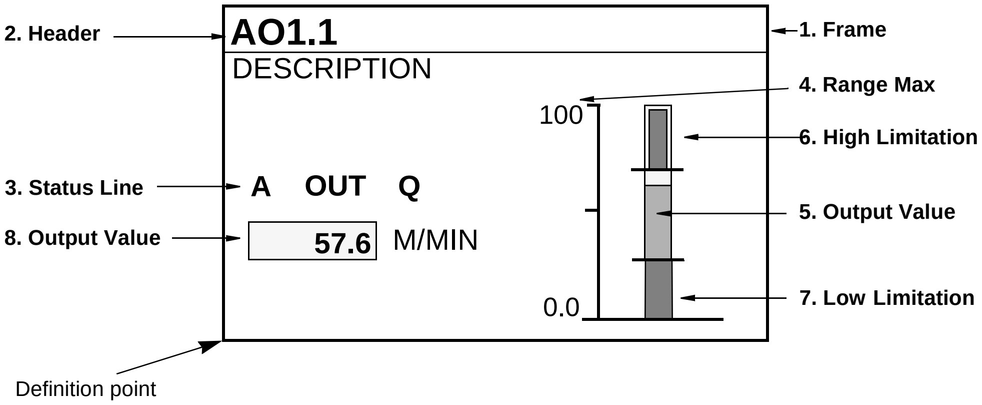
The conditions are in priority order. Underlined parameters are configurable.

Configuration:

Parameters	Affects	Options (bold is default)	Remarks
ManualColor	2. Output Value	**K9** (Cyan), any color	*Bargraph color in manual mode*
AutoColor	2. Output Value	**K11** (Magenta), any color	*Bargraph color in auto mode*
TopLeftColor	1.2 TopLeftEdge	**N13** (Grey), any color	*Regarding the choice of the color it will be three dimension effect*
BottomRightColor	1.3 BottomRightEdge	**N13** (Grey), any color	
FrameColor	1.1 SelectFrame	**K16** (Black), any color	
FrameWidth	1.1 SelectFrame	**2**, (**1**..4)	
BarBackColor	2. Output Value	**K16** (Black), any color	*Background color of the bargraph*
LimitationColor	3. High Limitation and 4. Low Limitation	**M16** (grey), any color	*Limitation line and mesh color*

4.2.7 AOWI01

Presentation:



Behavior:

No	Description	Presentation	Condition	Remarks
1	**Select Frame**			*Object select frame*
		White	SELECTED = 1	*Only for overlap*
		Black	-	
2	**Header**		NAME and DESCR	*Object Name and Description*
		Red flashing	AL_UNACK =1	*Unacknowledged*
		Yellow	OUTP_BLK = 1	*Output blocked*
		Red	ERR = 1	*Alarm*
		Cyan	MAN = 1	*Manual mode*
		Magenta	-	*Normal*
3	**Status Line**			*Status Line*
3.1	**Mode**	**M** Cyan	MAN = 1	*Manual mode*
		A Magenta	-	*Auto mode*
3.2	**Output Blocked**	**OUT** Yellow	OUTP_BLK = 1	*Output block*
3.3	**Error Indication**	**Q** Red	ERR = 1	*Signal error*
4.1	**Range Max**		RANGEMAX	
		Cyan	MAN = 1	*Manual mode*
		Magenta	-	*Auto mode*
4.2	**Range Min**		RANGEMIN	
		Cyan	MAN = 1	*Manual mode*
		Magenta	-	*Auto mode*

No	Description	Presentation	Condition	Remarks
5	**Output Value Bargraph**		VALUE	*Object output value*
		Cyan	MAN = 1	*Manual mode*
		Magenta	-	*Auto mode*
6	**High Limitation**		HI_LIM	*High limitation*
		-	HI_LIM > RANGEMAX or EN_HI = 0	*Invisible*
		Yellow	EN_HI = 1 and VALUE_HI = 1	
		Grey	EN_HI = 1	
7	**Low Limitation**		LO_LIM	*Low limitation*
		-	LO_LIM < RANGEMIN or EN_LO = 0	*Invisible*
		Yellow	EN_LO = 1 and VALUE_LO = 1	
		Grey	EN_LO = 1	
8.1	**OUT Value**	Cyan	MAN = 1	*Manual mode*
		Magenta	-	*Auto mode*
8.2	**OUT Unit**	Cyan	MAN = 1	*Manual mode*
		Magenta	-	*Auto mode*

4.3 Process Dialog for Data Base Parameters DAT

4.3.1 MIN Dialog (No authority key)

No dialog available.

4.3.2 MAX Dialog (Authority key)

4.3.2.1 Keyboard keys

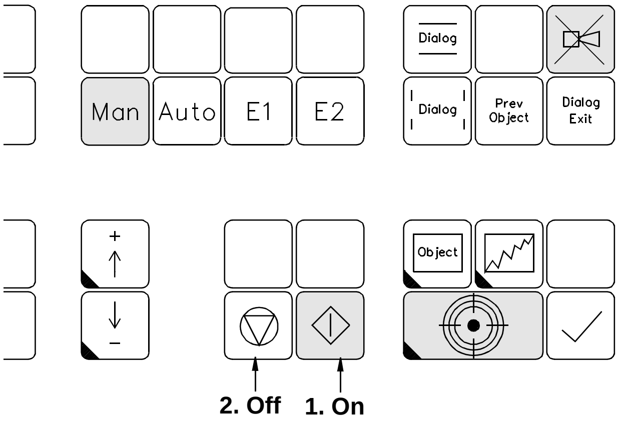


Figure 4-12. Keyboard keys

Key 1: On	Perform: Set Boolean to one if VAL_TYPE = 1	B0_VAL = 1
Key 2: Off	Perform: Set Boolean to zero if VAL_TYPE = 1	B0_VAL = 0

4.3.2.2 Dynamic keys, Top Level

D1 On	D2 Integer	D3 Integer Long	D4 Real	D5 Date
D6 Off	D7	D8	D9	D10 TIme

Figure 4-13. Dynamic keys

Data Type Boolean:

D1: On	Perform: Set Boolean to one if VAL_TYPE = 1 Pressed: green text Released: white text	B0_VAL = 1
D6: Off	Perform: Set Boolean to zero if VAL_TYPE = 1 Pressed: green text Released: white text	B0_VAL = 0

Data Type Integer:

D2: Integer	Perform: Change Integer value if VAL_TYPE = 2 Pressed: green text	IW_VAL

Data Type Integer Long:

D3: Integer Long	Perform: Change Integer Long value if VAL_TYPE = 3 Pressed: green text	IL_VAL

Data Type Real:

D4: Real	Perform: Change Real value if VAL_TYPE = 4 Pressed: green text	R_VAL

Data Type Date:

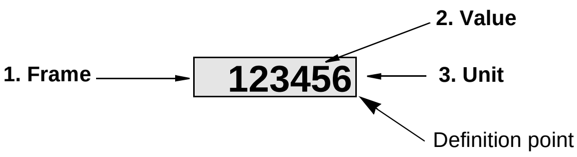
D5: Date	Perform: Change Date if VAL_TYPE = 127 Pressed: green text	IL_VAL

Data Type Time:

D10: Time	Perform: Change Time if VAL_TYPE = 126 Pressed: green text	IL_VAL

4.3.3 DATPD01

Presentation:



You can use this display element for datatypes Integer, IntegerLong and Real!

Behavior:

No	Description	Presentation	Condition	Remarks
1	**SelectFrame**	White	Dialog started against this element.	*The object frame*
		Black	-	FrameColor
2	**Value**		VALUE	*The object value*
		DAT(?) Green		*Illegal datatype*, ValueColor
		Green	VAL_TYPE in range 2...4	ValueColor
3	**Unit**	Green		*User defined unit*, ValueColor

The conditions are in priority order. Underlined parameters are configurable.

Configuration:

Parameters	Affects	Options (bold is default)	Remarks
DialogButtonText	Dialog		*Text presented on the dialogbutton.*
NumberOfDec	2. Value	**2**	*Number of decimals of the presented value if datatype is* ***Real****.*
Unit	3. Unit	‘’, empty string	
ValueColor	2. Value and 3. Unit	**K5** (Green), any color	
Font	2. Value	**FA40**, any font	
SelectAreaColor	1. SelectFrame	**K16** (Black), any color	
FrameColor	1. SelectFrame	**K16** (Black), any color	*mostly = SelectAreaColor*
FrameWidth	1. SelectFrame	**2**, (1..4)	
NumberOfChar	2. Value	**7**	*Including* ***.*** *and* ***-***

4.3.4 DATPD02

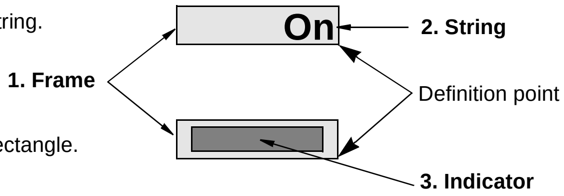
Presentation:

Presentation = true

Display element will present the value as a string.

Presentation = false

Display element will present the value as a rectangle.



Note! Use this display element only for datatype Boolean!

Behavior:

No	Description	Presentation	Condition	Remarks
1	**SelectFrame**	White	Dialog started against this element.	*The object frame*
		Black	-	FrameColor
2	**String**		Presentation = true	*The object value - String*
		On Green	VALUE = true	TrueString, TrueColor
		Off Green	VALUE = false	FalseString, FalseColor
3	**Indicator**		Presentation = false	*The object value - Indication*
		Filled Green	VALUE = true	TrueColor
		Unfilled Green	VALUE = false	FalseColor

The conditions are in priority order. Underlined parameters are configurable.

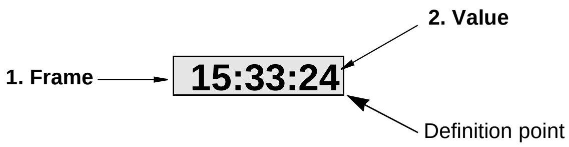
Configuration:

Parameters	Affects	Options (bold is default)	Remarks
Presentation	2. String and 3. Rectangle	**true**=String, false=Indicator	*How to present a boolean value.*
TrueColor	2. String	**K5** (Green), any color	
TrueAreaColor	1. SelectArea	**K16** (Black), any color	
FalseColor	2. String	**K5** (Green), any color	
FalseAreaColor	1. SelectArea	**K16** (Black), any color	
TrueString	2. String	**On**	
FalseString	2. String	**Off**	
TrueIndicatorColor	3. Indicator	**K5** (Green), any color	
FalseIndicatorColor	3. Indicator	**K5** (Green), any color	

Parameters	Affects	Options (bold is default)	Remarks
NumberOfChar	2. String	**40**, (1..40)	
Alignment	2. String	**1**=Left, 2=Center, 3=Right	*Text position in field*
Font	2. String	**FA40**, any color	
FrameColor	1. SelectFrame	**K16** (Black), any color	
FrameWidth	1. SelectFrame	**2**, (1..4)	
Bitno	2. String	**1**, (1..32)	

4.3.5 DATPD03

Presentation:



Behavior:

No	Description	Presentation	Condition	Remarks
1	**SelectFrame**	White	Dialog started against this element.	*The object frame*
		Black	-	FrameColor
2	**Value**		VALUE	*The object value*
		******* Green	Internal overflow in calculations.	ValueColor
		DAT(?) Green		*Illegal datatype,* ValueColor
		Green	VAL_TYPE = 3	ValueColor

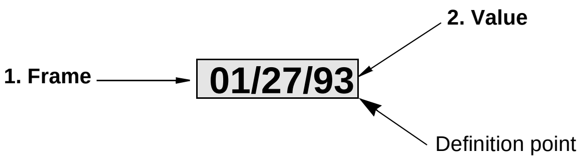
The conditions are in priority order. Underlined parameters are configurable.

Configuration:

Parameters	Affects	Options (bold is default)	Remarks
DialogButtonText	Dialog	**Time**	*The text that will be presented on the dialogbutton.*
ValueColor	2. Value	**K5** (Green), any color	
SelectAreaColor	1. SelectArea	**K16** (Black), any color	
Font	2. Value	**FA40**, any font	
TimeFormat	2. Value	**%H:%M:%S**	*%H :%M:%S or %H :%M*
UnitsPerSecond	2. Value	**10000**	*One second represented by this value*
FrameColor	1. SelectFrame	**K16** (Black), any color	*mostly = SelectAreaColor*
FrameWidth	1. SelectFrame	**2**, (1..4)	

4.3.6 DATPD04

Presentation:



Behavior:

No	Description	Presentation	Condition	Remarks
1	**SelectFrame**	White	Dialog started against this element.	*The object frame*
		Black	-	FrameColor
2	**Value**		VALUE	*The object value*
		******* Green	Internal overflow in calculations.	ValueColor
		DAT(?) Green		*Illegal datatype,* ValueColor
		Green	VAL_TYPE = 3	ValueColor

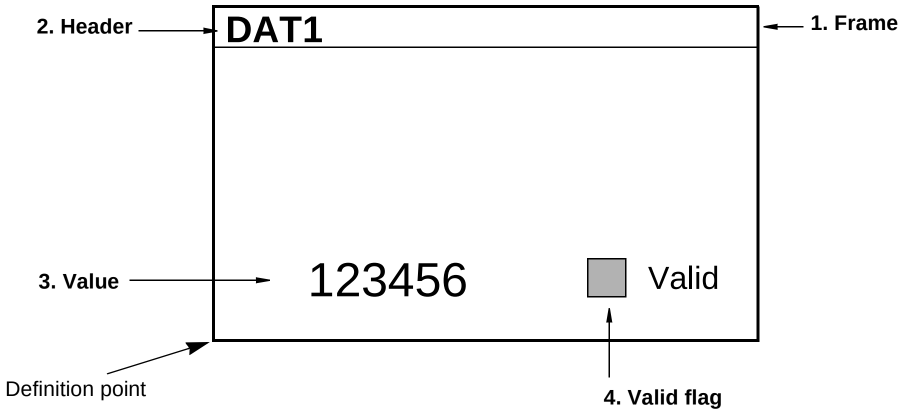
The conditions are in priority order. Underlined parameters are configurable.

Configuration:

Parameters	Affects	Options (bold is default)	Remarks
DialogButtonText	Dialog	**Date**	*The text that will be presented on the dialogbutton.*
ValueColor	2. Value	**K5** (Green), any color	
SelectAreaColor	1. SelectArea	**K16** (Black), any color	
Font	2. Value	**FA40**, any font	
DateFormat	2. Value	**%x**	*TiimePresentation*
FrameColor	1. SelectFrame	**K16** (Black), any color	*mostly = SelectAreaColor*
FrameWidth	1. SelectFrame	**2**, (1..4)	

4.3.7 DATWI01

Presentation:



Behavior:

No	Description	Presentation	Condition	Remarks
1	**Select Frame**			*Object select frame*
		Black	-	
2	**Header**	Green	NAME	*The object name*
3	**Value**		VALUE	*The object value*
		DAT(?) Green		*Illegal datatype*
		Green	VAL_TYPE in range 1...4	
4	**Valid flag**	■ Green	VALID = 1	*Object validity*
		□ Green	VALID = 0	

4.4 Process Dialog for Digital Input DI

4.4.1 MIN Dialog (No authority key)

4.4.1.1 Keyboard keys

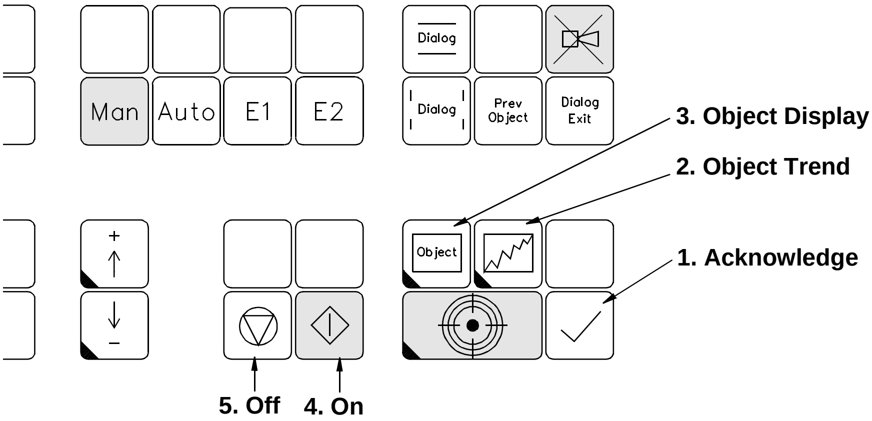


Figure 4-14. Keyboard keys

Key 1: Acknowledge	Perform: Acknowledge	AL_UNACK = 0
Key 2: Object Trend	Select: Object Trend	
Key 3: Object Display	Select: Object Display	
Key 4: On	Perform: Set value to one if BLOCKED = 1	VALUE = 1
Key 5: Off	Perform: Set value to zero if BLOCKED = 1	VALUE = 0

4.4.1.2 Dynamic keys, Keyboard

D1 ■ On	D2	D3	D4	D5
D6 ☐ Off	D7 Acknowledge	D8 Object Display	D9 Object Trend	D10

Figure 4-15. Dynamic keys

D1: On	Perform: Set value to one if BLOCKED = 1 If BLOCKED = 0 then key is dimmed	VALUE = 1
D6: Off	Perform: Set value to zero if BLOCKED = 1 If BLOCKED = 0 then key is dimmed	VALUE = 0
D7: Acknowledge	Perform: Acknowledge	AL_UNACK = 0
D8: Object Display	Select: Object Display	
D9: Object Trend	Select: Object Trend	

4.4.2 MAX Dialog (Authority key)

4.4.2.1 Keyboard keys

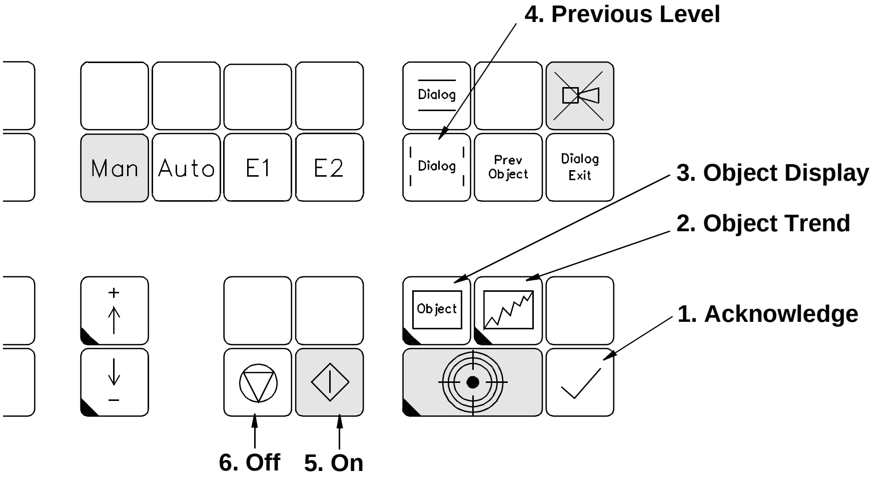


Figure 4-16. Keyboard keys

Key 1: Acknowledge	Perform: Acknowledge	AL_UNACK = 0
Key 2: Object Trend	Select: Object Trend	
Key 3: Object Display	Select: Object Display	
Key 4: Previous Level	Select Dynamic keys: Top Level	
Key 5: On	Perform: Set value to one if BLOCKED = 1	VALUE = 1
Key 6: Off	Perform: Set value to zero if BLOCKED = 1	VALUE = 0

4.4.2.2 Dynamic keys, Top Level

D1 Block Input	D2 Block Alarm	D3 Block Printout	D4	D5
D6 Deblock Input	D7 Deblock Alarm	D8 Deblock Printout	D9 Alarm Delay	D10 Keyboard...

Figure 4-17. Dynamic keys

D1: Block Input	Pressed: yellow text Released: white text	BLOCKED = 1
D2: Block Alarm	Pressed: yellow text Released: white text	AL_BLK = 1
D3: Block Printout	Pressed: yellow text Released: white text	PR_BLK = 1
D6: Deblock Input	Pressed: green text Released: white text	BLOCKED = 0
D7: Deblock Alarm	Pressed: green text Released: white text	AL_BLK = 0
D8: Deblock Printout	Pressed: green text Released: white text	PR_BLK = 0
D9: Alarm Delay	Pressed: Dialog for changing Alarm Delay	AL_DELAY
D10: Keyboard...	Select Dynamic keys: Keyboard	

4.4.2.3 Dynamic keys, Keyboard

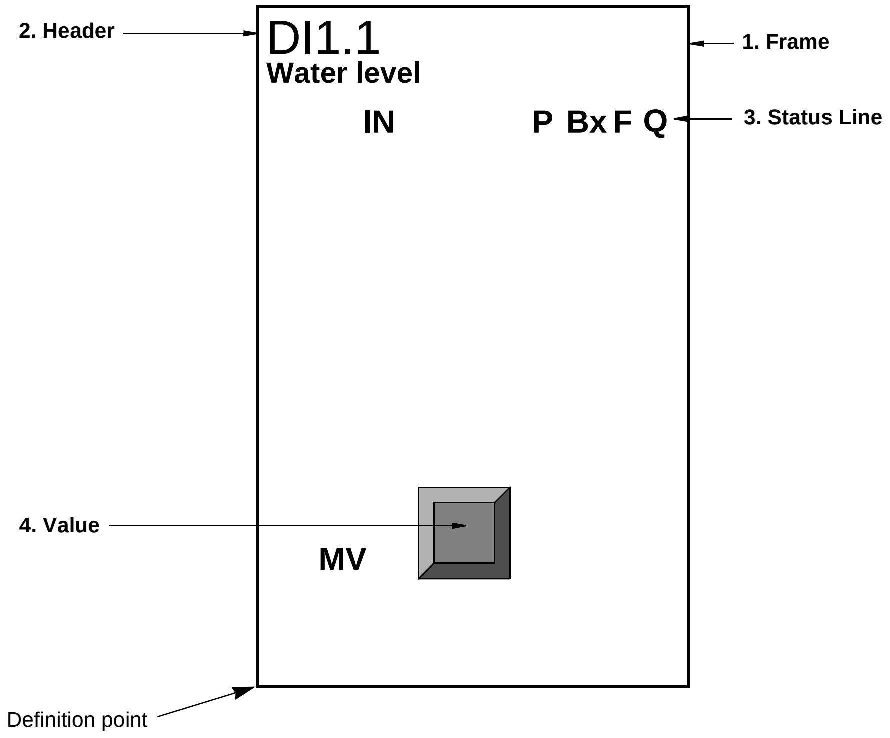
D1 ■ On	D2	D3	D4	D5
D6 □ Off	D7 Acknowledge	D8 Object Display	D9 Object Trend	D10

Figure 4-18. Dynamic keys

D1: On	Perform: Set value to one if BLOCKED = 1 If BLOCKED = 0 then key is dimmed	VALUE = 1
D6: Off	Perform: Set value to zero if BLOCKED = 1 If BLOCKED = 0 then key is dimmed	VALUE = 0
D7: Acknowledge	Perform: Acknowledge	AL_UNACK = 0
D8: Object Display	Select: Object Display	
D9: Object Trend	Select: Object Trend	

4.4.3 DIGR01

Presentation:



Behavior:

No	Description	Presentation	Condition	Remarks
1	**Select Frame**	White	SELECTED = 1	*Object select frame*
		Black	-	
2	**Header**		NAME and DESCR	*Object Name and Description*
		Red flashing	AL_UNACK = 1	*Unacknowledged*
		Yellow	BLOCKED = 1	*Input blocked*
		Red	DISTURB = 1 or ERR = 1	*Alarm*
		Green	-	*Normal*
3	**Status Line**			*Status Line*
3.1	**Input Blocked**	**IN** Yellow	BLOCKED = 1	*Input blocked*
3.2	**Printout Blocked**	**P** Yellow	PR_BLK = 1	*Printout blocked*

No	Description	Presentation	Condition	Remarks
3.3	**Alarm Blocked**	**B** Yellow	AL_BLK = 1	*Alarm blocked by operator*
		Bx Yellow	AL_P_BLK = 1	*Alarm blocked by PC-program*
3.4	**Alarm Indication**	**F** Red	DISTURB = 1	*Alarm*
3.5	**Error Indication**	**Q** Red	ERR = 1	*I/O Error*
4.1	**MV Text**	**MV** Grey		*Text in front of the value*
4.2	**Value**			*3D Display object*
		■ Green	VALUE = 1	*Symbol released*
		□ Black/Green borders	VALUE = 0	*Symbol pressed in*

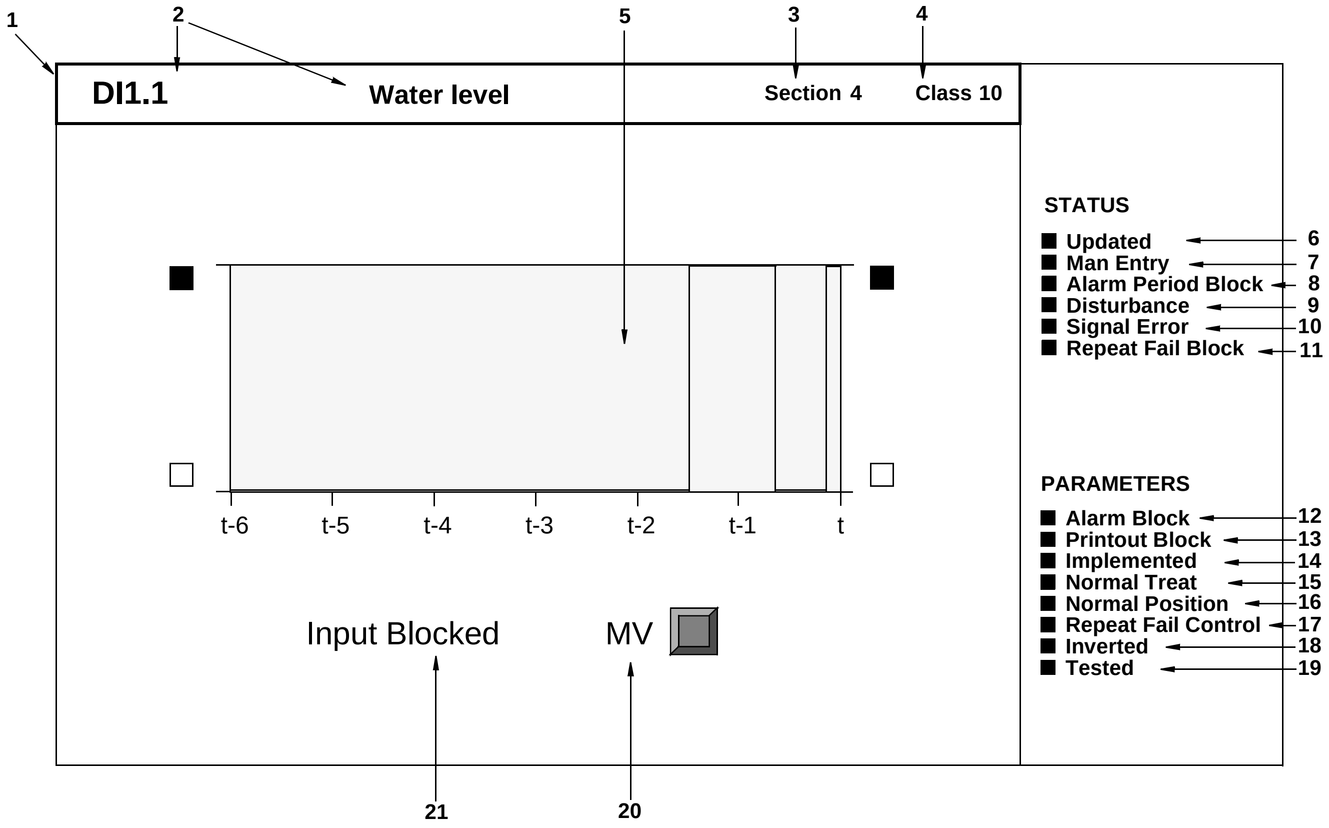
The conditions are in priority order. Underlined parameters are configurable.

Configuration:

Parameters	Affects	Options (bold is default)	Remarks
NameFont	2. Header Name	**FC50**, any font	

4.4.4 DIOB01

Presentation:



Behavior:

No	Description	Presentation	Condition	Remarks
1	**Select Frame**	White	SELECTED = 1	*Object select frame*
		Black	-	
2	**Header**		NAME and DESCR	*Object Name and Description*
		Red flashing	AL_UNACK = 1	*Unacknowledged*
		Yellow	BLOCKED = 1	*Input blocked*
		Red	DISTURB = 1 or ERR = 1	*Alarm*
		Green	-	*Normal*
3.1	**Section Text**	**Section** Grey		*Text in front of the value*

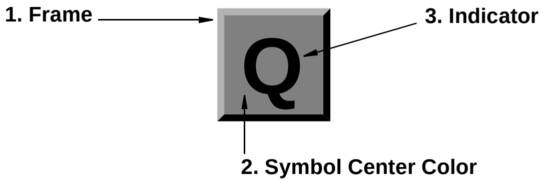
No	Description	Presentation	Condition	Remarks
3.2	**Section Value**	Green	PROC_SEC	*Process section*
4.1	**Class Text**	**Class** Grey		*Text in front of the value*
4.2	**Class Value**	Green	CLASS	*Object class*
5.1	**Value Trim Curve**	Green	VALUE	
5.2	**Range Indicators**	Filled		*Top indicator*
		Unfilled		*Bottom indicator*
6	**STATUS**			*Status*
6.1	**Updated Indication**	■ Green	UPDATED = 1	*Updated*
6.2	**Updated text**	**Updated** Grey		
7.1	**Manual entry Indication**	■ Green	MAN_ENTR = 1	*Manual entry flag*
7.2	**Manual entry text**	**Man Entry** Grey		*Man Entry text*
8.1	**Alarm period block Indication**	■ Yellow	AL_P_BLK = 1	*Alarm blocked by PC-program*
8.2	**Alarm period block text**	**Alarm Period Blk**		*Alarm Period Blk text*
		Yellow	AL_P_BLK = 1	
		Grey	-	
9.1	**Disturbance Indication**	■ Red flashing	AL_UNACK = 1	*Unacknowledged*
		■ Red	DISTURB = 1	*Fault*
9.2	**Disturbance Text**	**Disturbance**		*Disturbance text*
		Red	AL_UNACK = 1 or DISTURB = 1	
		Grey	-	
10.1	**Signal error Indication**	■ Red	ERR = 1	*I/O Error*

No	Description	Presentation	Condition	Remarks
10.2	**Signal error Text**	**Signal Error**		*Sinal Error text*
		Red	ERR = 1	
		Grey	-	
11.1	**Repeat fail block Indication**	■ Yellow	RP_F_BLK = 1	*Repeat fail blocked*
11.2	**Repeat fail block text**	**Repeat Fail Block**		*Repeat fail blocked text*
		Yellow	RP_F_BLK = 1	
		Grey	-	
12	**PARAMETERS**			*Parameters*
12.1	**Alarm block Indication**	■ Yellow	**Alarm Block** = 1	*Alarm blocked by operator*
12.2	**Alarm block Text**	**Alarm Block**		*Alarm blocked text*
		Yellow	**Alarm Block** = 1	
		Grey	-	
13.1	**Printout Indication**	■ Yellow	PR_BLK = 1	*Printout blocked*
13.2	**Printout Text**	**Printout Block**		*Printout blocked text*
		Yellow	PR_BLK = 1	
		Grey	-	
14.1	**Implemented Indication**	■ Green	ACT = 1	*Implemented*
14.2	**Implemented text**	**Implemented** Grey		*Implemented text*
15.1	**Normal treat Indication**	■ Green	NORM_TR = 1	*Normal object treat*
15.2	**Normal treat text**	**Normal Treat** Grey		*Normal object treat text*
16.1	**Normal position Indication**	■ Green	NORM_POS = 1	*Normal position*
		□ Green	NORM_POS = 0	
16.2	**Normal position text**	**Normal Position** Grey		*Normal position text*
17.1	**Repeat Fail Control Indication**	■ Green	RP_F_CTL = 1	*Repeat fail control*
17.2	**Repeat Fail Control text**	**Repeat Fail Control** Grey		*Repeat fail control text*
18.1	**Inverted Indication**	■ Green	INV = 1	*Inverted*
18.2	**Inverted text**	**Inverted** Grey		*Inverted text*

No	Description	Presentation	Condition	Remarks
19.1	**Tested Indication**	■ Green	TESTED = 1	*Tested*
19.2	**Tested text**	**Tested** Grey		*Tested text*
20.1	**MV Text**	**MV** Grey		*Text in front of the value*
20.2	**Value**			*3D Display object*
		■ Green	VALUE = 1	*Symbol released*
		☐ Black/Green borders	VALUE = 0	*Symbol pressed in*
21	**Input Blocked**	**Input Blocked** Yellow	BLOCKED = 1	*Input blocked*
		-	BLOCKED = 0	*Invisible*

4.4.5 DIPD01

Presentation:



Behavior:

No	Description	Presentation	Condition	Remarks
1	**Select Frame**	White	SELECTED = 1	*Object select frame*
		Dotted Yellow	AL_BLK = 1	*Alarm blocked by operator*
		Black	-	
2	**Symbol Center Color**		VALUE	*3D Display object*
		Black	ERR = 1	*I/O Error*
		Black	(Inverted = 1 and VALUE = 1) or VALUE = 0	*Inverted or Off* OffColor
		Flashing Red	AL_UNACK = 1	*Unacknowledged alarm*
		Yellow	BLOCKED = 1	*Updated blocked*
		Red	DISTURB = 1 and DisturbanceUsed = 1	*Alarm*
		Green	VALUE = 1	NormalColor
3	**Indicator**			
3.1	**Quality**	**Q** Flashing Red	AL_UNACK = 1 and ERR = 1	*Unacknowledged alarm*
		Q Yellow	BLOCKED = 1 and ERR = 1	*Updated blocked*
		Q Red	ERR = 1	*I/O Error*
3.2	**Label**	Label Grey	-	*User defined character* LabelColor

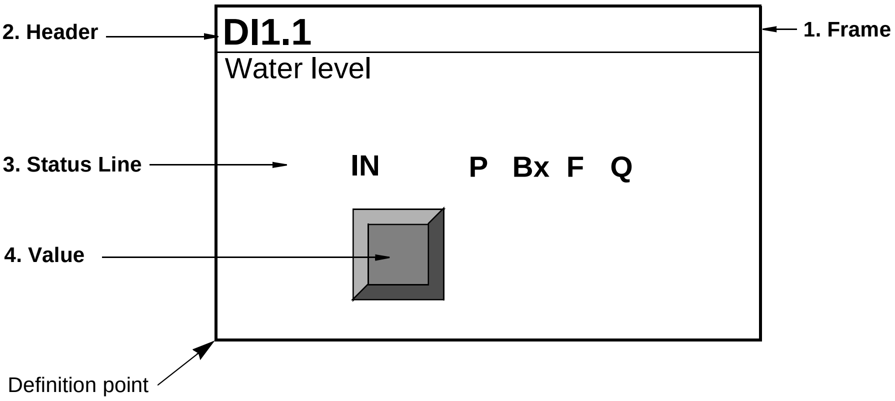
The conditions are in priority order. Underlined parameters are configurable.

Configuration:

Parameters	**Affects**	**Options (bold is default)**	**Remarks**
Label	3.2 Label	**" ",** any letter	*Indicates unit type* *ex: T for Temperature*
LabelColor	3.2 Label	**K16** (Black), any color	
LabelOffColor	3.2 Label	**B4** (Grey), any color	
LabelFont	3.2 Label	**FC10**, any font	
OffColor	2. Symbol	**K16** (Black), any color	*Center Color Off*
DarkNormalColor	2. Symbol	**M5** (Dark Green), any color	
LightNormalColor	2. Symbol	**L5** (Light Green), any color	
NormalColor	2. Symbol	**K5** (Green), any color	*Center Color On*
FrameWidth	1. SelectFrame	**2**, (1..4)	
Inverted	2. Symbol	**false**, true	
DisturbanceUsed	2. Symbol	**true**, false	

4.4.6 DIWI01

Presentation:



Behavior:

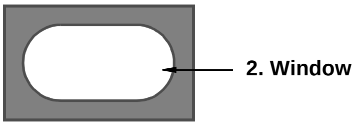
No	Description	Presentation	Condition	Remarks
1	**Select Frame**			*Object select frame*
		White	SELECTED = 1	*Only for overlap*
		Black	-	
2	**Header**		NAME and DESCR	*Object Name and Description*
		Red flashing	AL_UNACK = 1	*Unacknowledged*
		Yellow	BLOCKED = 1	*Input blocked*
		Red	DISTURB = 1 or ERR = 1	*Alarm*
		Green	-	*Normal*
3	**Status Line**			*Status Line*
3.1	**Input Blocked**	**IN** Yellow	BLOCKED = 1	*Input blocked*
3.2	**Printout Blocked**	**P** Yellow	PR_BLK = 1	*Printout blocked*
3.3	**Alarm Blocked**	**B** Yellow	AL_BLK = 1	*Alarm blocked by operator*
		Bx Yellow	AL_P_BLK = 1	*Alarm blocked by PC-program*
3.4	**Alarm Indication**	**F** Red	DISTURB = 1	*Alarm*
3.5	**Error Indication**	**Q** Red	ERR = 1	*I/O Error*
4.1	**MV Text**	**MV** Grey		*Text in front of the value*
4.2	**Value**			*3D Display object*

No	**Description**	**Presentation**	**Condition**	**Remarks**
		■ Green	VALUE = 1	*Symbol released*
		□ Black/Green borders	VALUE = 0	*Symbol pressed in*

4.5 Display link

4.5.1 DISP01

Presentation:



1. Symbol

Note! This display element is only for Display link!

Behavior:

No	Description	Presentation	Condition	Remarks
1	**Symbol**	Grey	-	*3D Static form*
2	**Window**			
	Label	Character(s)	Label	*LabelColor* & *LabelFont*
	Process	Process window	Process	
	Group	Group window	Group	
	Trend	Trend window	Trend	
	ButtonLabel	Button window	ButtonLabel	

Underlined parameters are configurable.

Configuration:

Parameters	Affects	Options (bold is default)	Remarks
Type	2. Window	**Label**, Process, Group, Trend and ButtonLabel	
Label	2. Window	‘’, empty string	

Parameters	**Affects**	**Options (bold is default)**	**Remarks**
LabelFont	2. Window	**FA40,** any font	
LabelColor	2. Window	**K5** (Green), any color	

4.6 Process Dialog for Digital Output DO

4.6.1 MIN Dialog (No authority key)

4.6.1.1 Keyboard keys

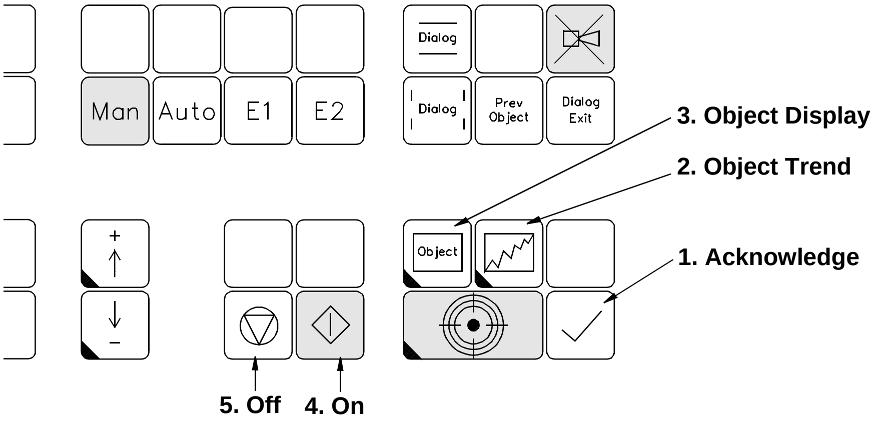


Figure 4-19. Keyboard keys

Key 1: Acknowledge	Perform: Acknowledge	AL_UNACK = 0
Key 2: Object Trend	Select: Object Trend	
Key 3: Object Display	Select: Object Display	
Key 4: On	Perform: Set value to one if MAN = 1	VALUE = 1
Key 5: Off	Perform: Set value to zero if MAN = 1	VALUE = 0

4.6.1.2 Dynamic keys, Keyboard

D1 ■ On	D2	D3	D4	D5
D6 ☐ Off	D7 Acknowledge	D8 Object Display	D9 Object Trend	D10

Figure 4-20. Dynamic keys

D1: On	Perform: Set value to one if MAN = 1 If MAN = 0 then key is dimmed	VALUE = 1
D6: Off	Perform: Set value to zero if MAN = 1 If MAN = 0 then key is dimmed	VALUE = 0
D7: Acknowledge	Perform: Acknowledge	AL_UNACK = 0
D8: Object Display	Select: Object Display	
D9: Object Trend	Select: Object Trend	

4.6.2 MAX Dialog (Authority key)

4.6.2.1 Keyboard keys

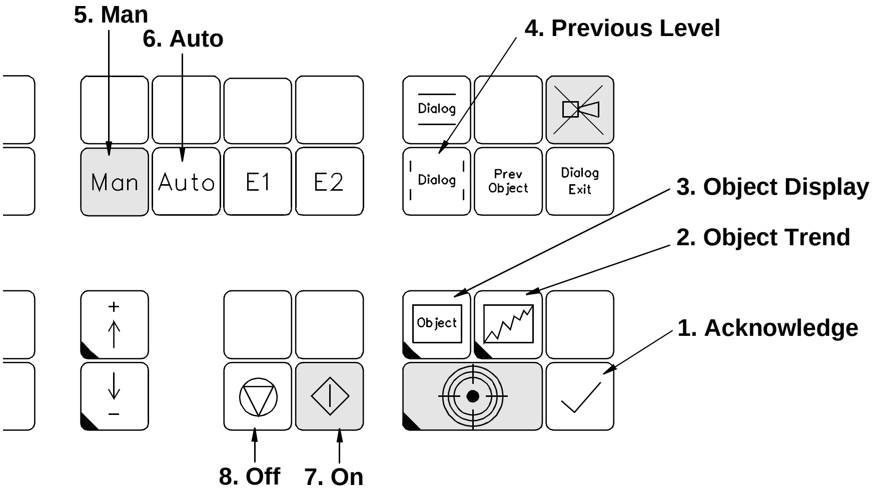


Figure 4-21. Keyboard keys

Key 1: Acknowledge	Perform: Acknowledge	AL_UNACK = 0
Key 2: Object Trend	Select: Object Trend	
Key 3: Object Display	Select: Object Display	
Key 4: Previous Level	Select Dynamic keys: Top Level	
Key 5: Man	Perform: Set to manual mode	MAN = 1
Key 6: Auto	Perform: Set to automatic mode	MAN = 0
Key 7: On	Perform: Set value to one if MAN = 1	VALUE = 1
Key 8: Off	Perform: Set value to zero if MAN = 1	VALUE = 0

4.6.2.2 Dynamic keys, Top Level

D1 Block Output	D2	D3	D4	D5
D6 Deblock Output	D7	D8	D9	D10 Keyboard...

Figure 4-22. Dynamic keys

D1: Block Output	Pressed: yellow text Released: white text	OUTP_BLK = 1
D6: Deblock Output	Pressed: green text Released: white text	OUTP_BLK = 0
D10: Keyboard...	Select Dynamic keys: Keyboard	

4.6.2.3 Dynamic keys, Keyboard

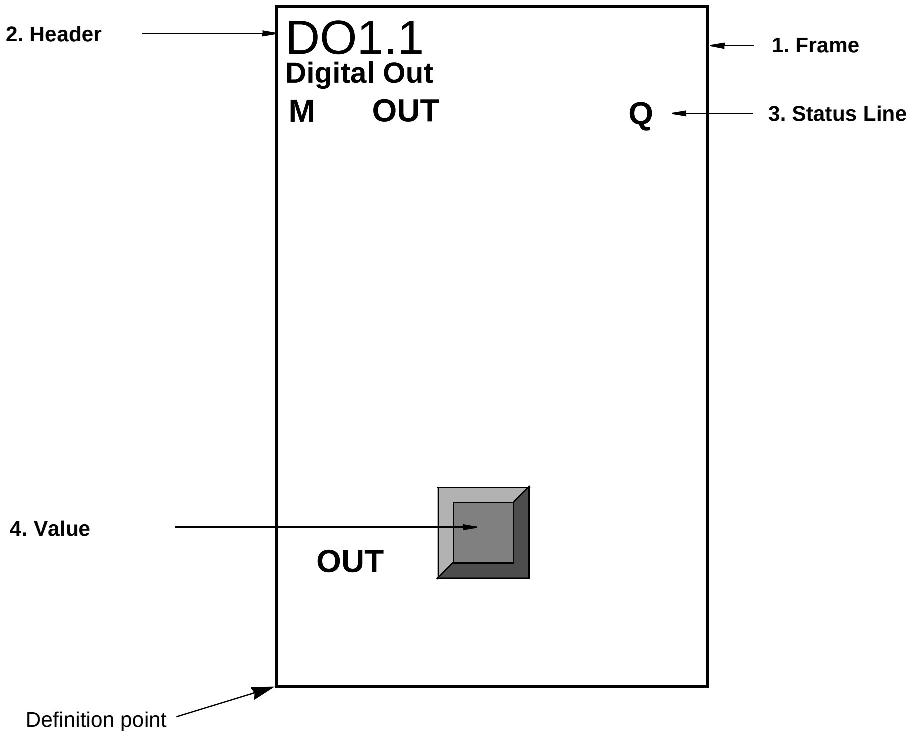
D1 ■ On	D2 Man	D3 Auto	D4	D5
D6 □ Off	D7 Acknowledge	D8 Object Display	D9 Object Trend	D10

Figure 4-23. Dynamic keys

D1: On	Perform: Set value to one if MAN = 1 If MAN = 0 then key is dimmed	VALUE = 1
D2: Man	Perform: Set to manual mode	MAN = 1
D3: Auto	Perform: Set to automatic mode	MAN = 0
D6: Off	Perform: Set value to zero if MAN = 1 If MAN = 0 then key is dimmed	VALUE = 0
D7: Acknowledge	Perform: Acknowledge	AL_UNACK = 0
D8: Object Display	Select: Object Display	
D9: Object Trend	Select: Object Trend	

4.6.3 DOGR01

Presentation:



Behavior:

No	Description	Presentation	Condition	Remarks
1	**Select Frame**	White	SELECTED = 1	*Object select frame*
		Black	-	
2	**Header**		NAME and DESCR	*Object Name and Description*
		Red flashing	AL_UNACK =1	*Unacknowledged*
		Yellow	OUTP_BLK = 1	*Output blocked*
		Red	ERR = 1	*Alarm*
		Cyan	MAN = 1	*Manual mode*
		Magenta	-	*Normal*
3	**Status Line**			*Status Line*
3.1	**Mode**	**M** Cyan	MAN = 1	*Manual mode*
		A Magenta	-	*Auto mode*
3.2	**Output Blocked**	**OUT** Yellow	OUTP_BLK = 1	*Output block*
3.3	**Error Indication**	**Q** Red	ERR = 1	*Signal error*

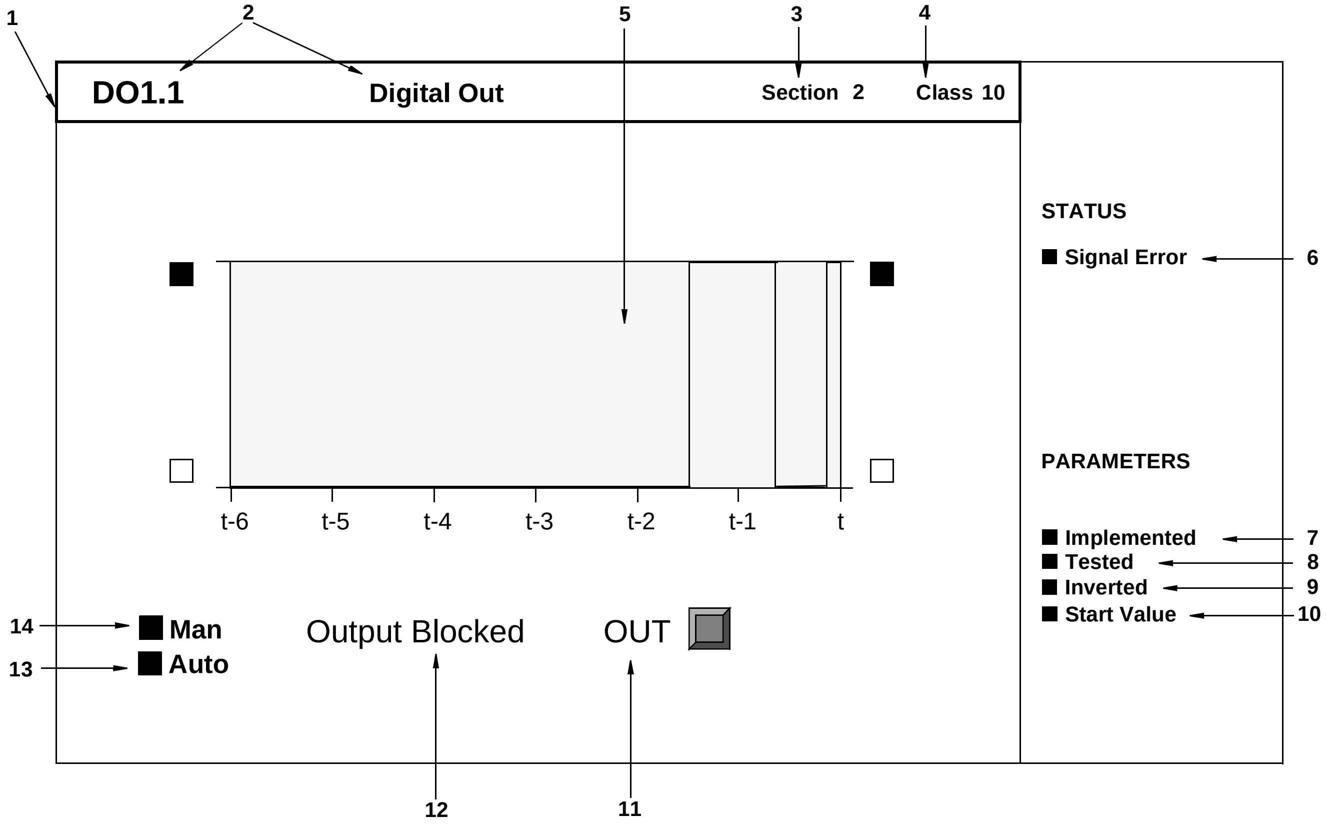
No	Description	Presentation	Condition	Remarks
4.1	**OUT Text**	**OUT** Grey		*Text in front of the value*
4.2	**Value**			*3D Display object*
		■	VALUE = 1	*Symbol released*
		□	VALUE = 0	*Symbol pressed in*
	Color	Cyan	MAN = 1	
		Magenta		

Configuration:

Parameters	Affects	Options (bold is default)	Remarks
NameFont	2. Header Name	**FC50**, any font	

4.6.4 DOOB01

Presentation:



Behavior:

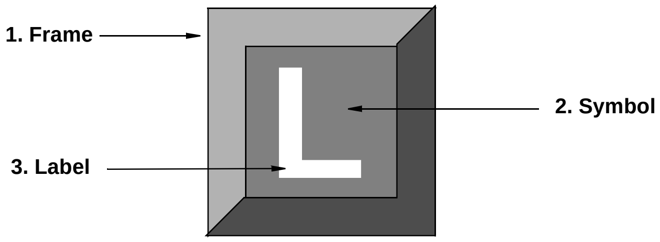
No	Description	Presentation	Condition	Remarks
1	**Select Frame**	White	SELECTED = 1	*Object select frame*
		Black	-	
2	**Header**		NAME and DESCR	*Object Name and Description*
		Red flashing	AL_UNACK =1	*Unacknowledged*
		Yellow	OUTP_BLK = 1	*Output blocked*
		Red	ERR = 1	*Alarm*
		Cyan	MAN = 1	*Manual mode*
		Magenta	-	*Normal*
3.1	**Section Text**	**Section** Grey		*Text in front of the value*
3.2	**Section Value**	Green	PROC_SEC	*Process section*
4.1	**Class Text**	**Class** Grey		*Text in front of the value*
4.2	**Class Value**	Green	CLASS	*Object class*

No	Description	Presentation	Condition	Remarks
5.1	**Value Trim Curve**		VALUE	*Value*
		Cyan	MAN = 1	
		Magenta	-	
5.2	**Range Indicators**	Filled		*Top indicator*
		Unfilled		*Bottom indicator*
6	**STATUS**			*Status*
6.1	**Signal error Indication**	■ Red	ERR = 1	*I/O Error*
6.2	**Signal error Text**	**Signal Error**		*Signal Error text*
		Red	ERR = 1	
		Grey	-	
7	**PARAMETERS**			*Parameters*
7.1	**Implemented Indication**	■ Green	ACT = 1	*Implemented*
7.2	**Implemented Text**	**Implemented** Grey		*Implemented text*
8.1	**Tested Indication**	■ Green	TESTED = 1	*Tested*
8.2	**Tested Text**	**Tested** Grey		*Tested text*
9.1	**Inverted Indication**	■ Green	INV = 1	*Inverted*
9.2	**Inverted Text**	**Inverted** Grey		*Inverted text*
10.1	**StartValue Indication**	**Last Val** Green	RESTART = 1	*Start value*
		■ Green	STVAL = 1 and RESTART = 0	
		☐ Green	STVAL = 0 and RESTART = 0	
10.2	**StartValue Text**	**Start Value** Grey		*Start Value text*
11.1	**OUT Text**	**OUT** Grey		*Text in front of the value*
11.2	**Value**			*3D Display object*
		■	VALUE = 1	*Symbol released*
		☐	VALUE = 0	*Symbol pressed in*
	Color	Cyan	MAN = 1	
		Magenta	-	
12	**Output Blocked**	**Output Blocked** Yellow	OUTP_BLK = 1	*Output blocked*
		-	OUTP_BLK = 0	*Invisible*
13.1	**Auto Indication**	■ Magenta	MAN = 0	*Auto mode*
13.2	**Auto Text**	**Auto**		*Auto text*
		Magenta	MAN = 0	*Auto mode*
		Grey	MAN = 1	*Manual mode*
14.1	**Man Indication**	■ Cyan	MAN = 1	*Manual mode*
14.2	**Man Text**	**Man**		*Manual text*

No	Description	Presentation	Condition	Remarks
		Cyan	MAN = 1	*Manual mode*
		Grey	MAN = 0	*Auto mode*

4.6.5 DOPD01

Presentation:



Behavior:

No	Description	Presentation	Condition	Remarks
1	**Select Frame**	White	SELECTED = 1	*Object select frame*
		Black	-	
2	**Symbol Center Color**		VALUE	*3D Display object*
		Black	(Inverted = 1 and VALUE = 1) or VALUE = 0	*Inverted or Off* OffColor
		Flashing Red	AL_UNACK = 1	*Unacknowledged alarm*
		Yellow	OUTP_BLK = 1	*Updated blocked*
		Red	ERR = 1	*Alarm*
		Cyan	MAN = 1	MediumManColor
		Magenta	VALUE = 1	MediumAutoColor
3	**Label**			*User defined character*
		Label Grey	**-**	LabelColor

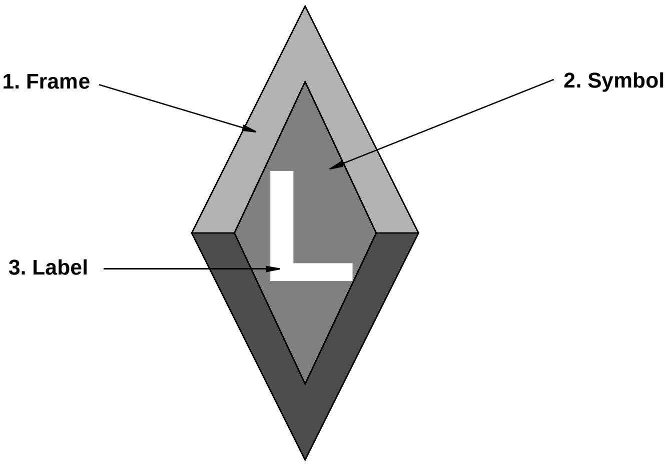
The conditions are in priority order. Underlined parameters are configurable.

Configuration:

Parameters	**Affects**	**Options (bold is default)**	**Remarks**
Label	3. Label	**none**, any character	*any letter ex: O for Open*
LabelColor	3. Label	**K16** (Black), any color	
LabelOffColor	3. Label	**B4** (Grey), any color	
LabelFont	3. Label	**FC10**, any font	
OffColor	2. Symbol	**K16** (Black), any color	*Center Color Off*
DarkAutoColor	2. Symbol	**M11** (Magenta), any color	
MediumAutoColor	2. Symbol	**K11** (Magenta), any color	*Center Auto Color On*
LightAutoColor	2. Symbol	**L11** (Magenta), any color	
DarkManColor	2. Symbol	**M9** (Cyan), any color	
MediumManColor	2. Symbol	**K9** (Cyan), any color	*Center Man Color On*
LightManColor	2. Symbol	**L9** (Cyan), any color	
FrameWidth	1. SelectFrame	**2**, (1..4)	
Inverted	2. Symbol	**false**, true	

4.6.6 DOPD02

Presentation:



Behavior:

No	Description	Presentation	Condition	Remarks
1	**Select Frame**	White	SELECTED = 1	*Object select frame*
		Black	-	
2	**Symbol Center Color**		VALUE	*3D Display object*
		Black	VALUE = 0	*Off* OffColor
		Flashing Red	AL_UNACK = 1	*Unacknowledged alarm*
		Yellow	OUTP_BLK = 1	*Updated blocked*
		Red	ERR = 1	*Alarm*
		Cyan	MAN = 1	MediumManColor
		Magenta	VALUE = 1	MediumAutoColor
3	**Label**			*User defined character*
		Label Grey	**-**	LabelColor

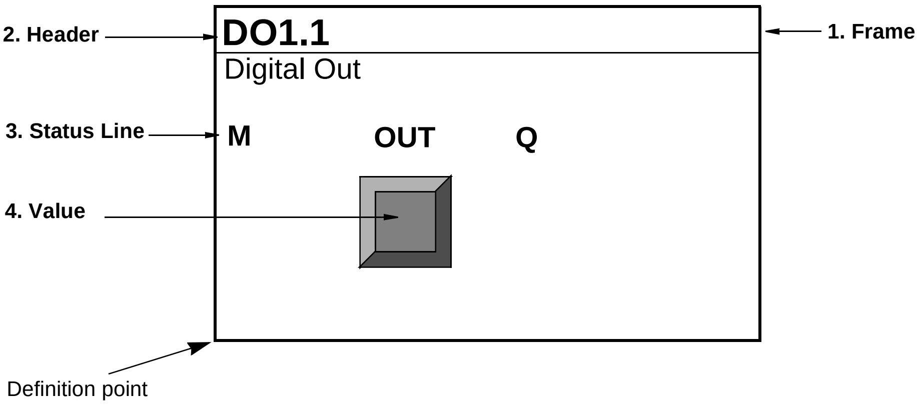
The conditions are in priority order. Underlined parameters are configurable.

Configuration:

Parameters	**Affects**	**Options (bold is default)**	**Remarks**
Label	3. Label	**none**, any character	*any letter ex: O for Open*
LabelColor	3. Label	**K16** (Black), any color	
LabelOffColor	3. Label	**B4** (Grey), any color	
LabelFont	3. Label	**FC10**, any font	
OffColor	2. Symbol	**K16** (Black), any color	*Center Color Off*
DarkAutoColor	2. Symbol	**M11** (Magenta), any color	
MediumAutoColor	2. Symbol	**K11** (Magenta), any color	*Center Auto Color On*
LightAutoColor	2. Symbol	**L11** (Magenta), any color	
DarkManColor	2. Symbol	**M9** (Cyan), any color	
MediumManColor	2. Symbol	**K9** (Cyan), any color	*Center Man Color On*
LightManColor	2. Symbol	**L9** (Cyan), any color	
FrameWidth	1. SelectFrame	**2**, (1..4)	

4.6.7 DOWI01

Presentation:



Behavior:

No	Description	Presentation	Condition	Remarks
1	**Select Frame**			*Object select frame*
		White	SELECTED = 1	*Only for overlap*
		Black	-	
2	**Header**		NAME and DESCR	*Object Name and Description*
		Red flashing	AL_UNACK =1	*Unacknowledged*
		Yellow	OUTP_BLK = 1	*Output blocked*
		Red	ERR = 1	*Alarm*
		Cyan	MAN = 1	*Manual mode*
		Magenta	-	*Normal*
3	**Status Line**			*Status Line*
3.1	**Mode**	**M** Cyan	MAN = 1	*Manual mode*
		A Magenta	-	*Auto mode*
3.2	**Output Blocked**	**OUT** Yellow	OUTP_BLK = 1	*Output block*
3.3	**Error Indication**	**Q** Red	ERR = 1	*Signal error*
4	**Value**			*3D Display object*
		■	VALUE = 1	*Symbol released*
		□	VALUE = 0	*Symbol pressed in*
	Color	Cyan	MAN = 1	
		Magenta	-	

4.7 Process Dialog for Group Alarm

4.7.1 MIN Dialog (No authority key)

4.7.1.1 Keyboard keys

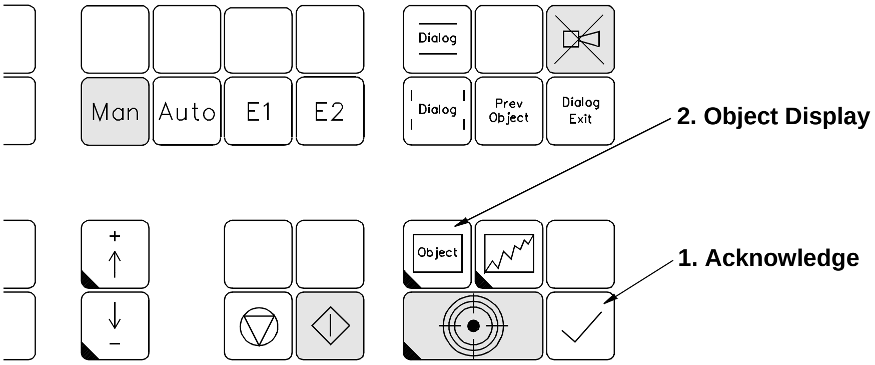


Figure 4-24. Keyboard keys

Key 1: Acknowledge	Perform: Acknowledge	AL_UNACK = 0
Key 2: Object Display	Select: Object Display	

4.7.1.2 Dynamic keys, Top Level

D1	D2	D3	D4	D5 Configuration
D6	D7 Acknowledge	D8 Object Display	D9	D10

Figure 4-25. Dynamic keys

D5: Configuration	Perform: Bring up the Group Alarm Configuration Window	
D7: Acknowledge	Perform: Acknowledge	AL_UNACK = 0
D8: Object Display	Select: Object Display	

4.7.2 MAX Dialog (Authority key)

4.7.2.1 Keyboard keys

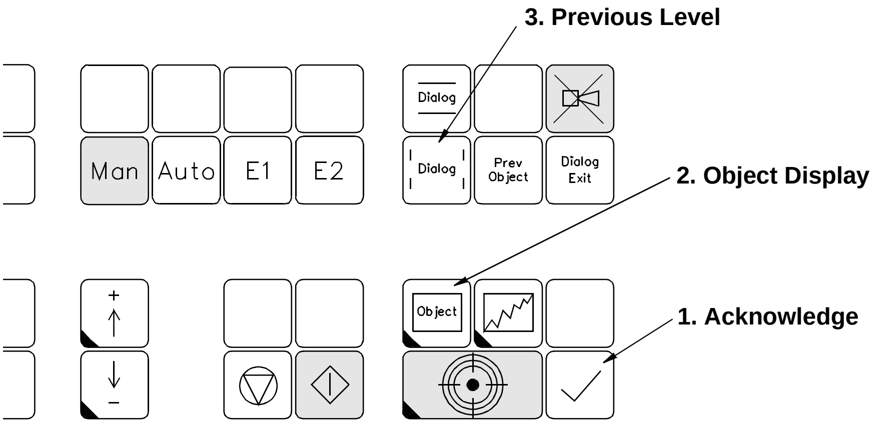


Figure 4-26. Keyboard keys

Key 1: Acknowledge	Perform: Acknowledge	AL_UNACK = 0
Key 2: Object Display	Select: Object Display	
Key 3: Previous Level	Select Dynamic keys: Top Level	

4.7.2.2 Dynamic keys, Top Level

D1	D2	D3	D4 Block...	D5 Configuration
D6	D7 Acknowledge	D8 Object Display	D9	D10

Figure 4-27. Dynamic keys

D4: Block...	Select Dynamic keys: Block	
D5: Configuration	Perform: Bring up the Group Alarm Configuration Window	
D7: Acknowledge	Perform: Acknowledge	AL_UNACK = 0
D8: Object Display	Select: Object Display	

4.7.2.3 Dynamic keys, Block

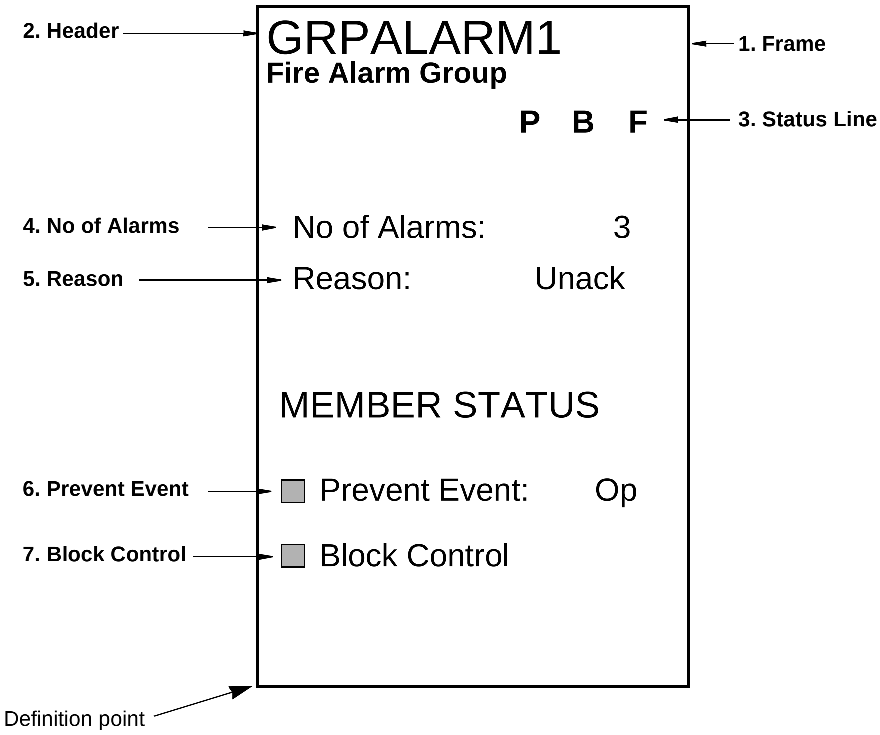
D1 Block Alarm	D2 Block Printout	D3	D4 Block Object Alarm	D5 Block Object Printout
D6 Deblock Alarm	D7 Deblock Printout	D8	D9 Deblock Object Alarm	D10 Deblock Object Printout

Figure 4-28. Dynamic keys

D1: Block Alarm	Pressed: yellow text Released: white text	AL_BLK = 1
D2: Block Printout	Pressed: yellow text Released: white text	PR_BLK = 1
D4: Block Object Alarm	Pressed: green text Released: white text	M_AL_BLK = 1
D5: Block Object Printout	Pressed: green text Released: white text	M_PR_BLK = 1
D6: Deblock Alarm	Pressed: yellow text Released: white text	AL_BLK = 0
D7: Deblock Printout	Pressed: yellow text Released: white text	PR_BLK = 0
D9: Deblock Object Alarm	Pressed: green text Released: white text	M_AL_BLK = 0
D10: Deblock Object Printout	Pressed: green text Released: white text	M_PR_BLK = 0

4.7.3 GAGR01

Presentation:



Behavior:

No	Description	Presentation	Condition	Remarks
1	**Select Frame**	White	SELECTED = 1	*Object select frame*
		Black	-	
2	**Header**		NAME and DESCR	*Object Name and Description*
		Red flashing	AL_UNACK = 1	*Unacknowledged*
		Red	DISTURB = 1	*Alarm*
		Green	-	*Normal*
3	**Status Line**			*Status Line*
3.1	**Printout Blocked**	**P** Yellow	PR_BLK = 1	*Print block*
3.2	**Alarm Blocked**	**B** Yellow	AL_BLK = 1	*Alarm blocked by operator*
		Bx Yellow	AL_P_BLK = 1	*Alarm blocked by PC-program*
3.3	**Alarm Indication**	**F** Red	DISTURB =1	*Alarm*

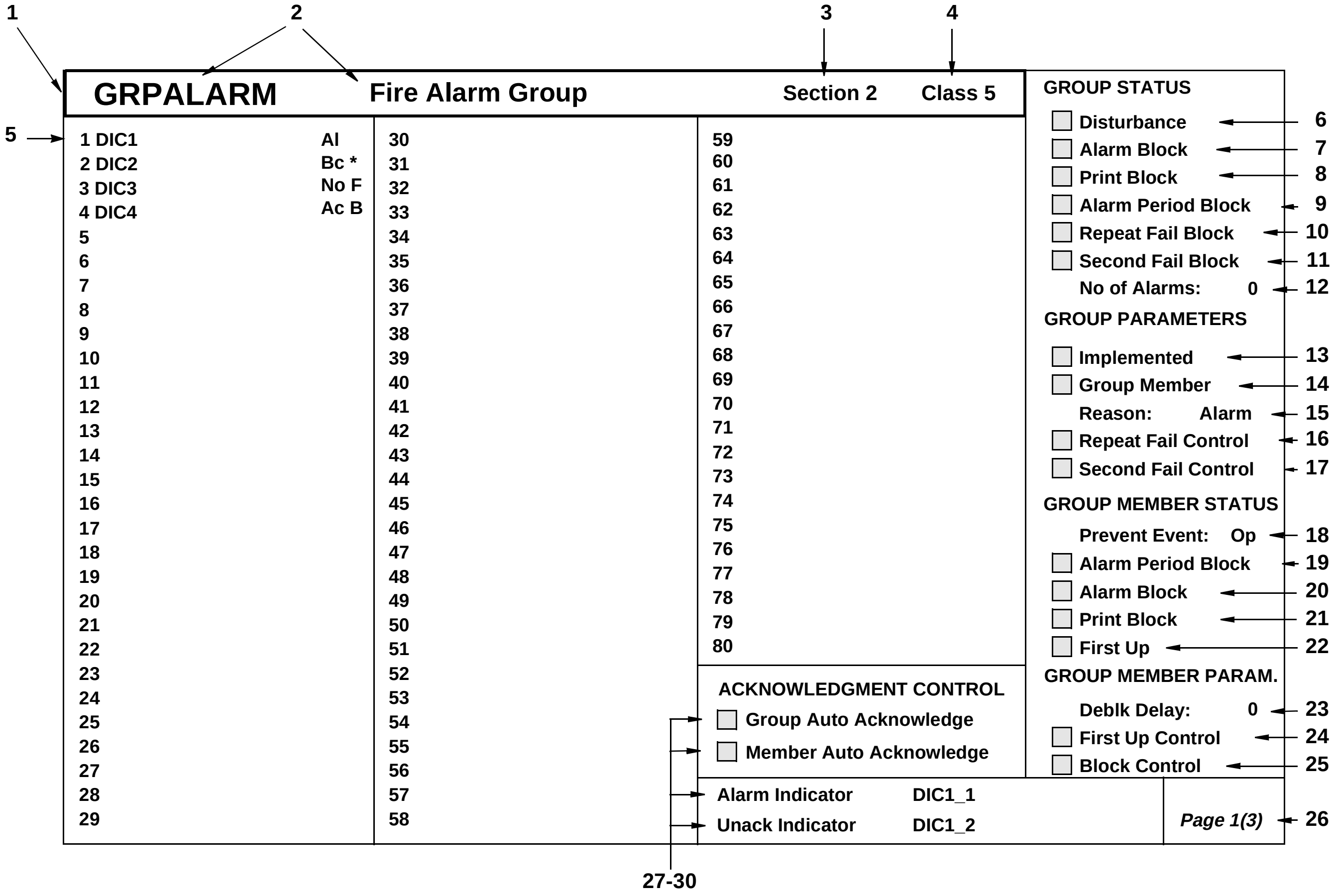
No	Description	Presentation	Condition	Remarks
4.1	**No of Alarms Text**	**No of Alarms:** Grey		*Dist Counter*
4.2	**No of Alarms Value**	Red	DST_CNT > 0	
		Green	DST_CNT = 0	
5.1	**Reason Text**	**Reason:** Grey		
5.2	**Reason Value**	**Alarm** Green	REASON = Alarm	
		Unack Green	REASON = Unack	
6	**MEMBER STATUS**	Grey		*Status*
6.1	**Prevent Event Indication**	■ Yellow	PREV_OP = 1 or PREV_PGM = 1 or PREV_EXT = 1	
6.2	**Prevent Event Text**	**Prevent Event:** Grey		
6.3	**Prevented Event Handling**	**Op** Green	PREV_OP = 1	
		Pgm Green	PREV_PGM = 1	
		Ext Green	PREV_EXT = 1	
7.1	**Block Control Indication**	■ Green		
7.2	**Block Control Text**	**Block Control** Grey	BLK_CTL = 1	*Block Control*

Configuration:

Parameters	Affects	Options (bold is default)	Remarks
NameFont	2. Header Name	**FC50**, any font	

4.7.4 GAOB01

Presentation:



Behavior:

No	Description	Presentation	Condition	Remarks
1	**Select Frame**	White	SELECTED = 1	*Object select frame*
		Black	-	
2	**Header**		NAME and DESCR	*Object Name and Description*
		Red flashing	AL_UNACK = 1	*Unacknowledged*
		Red	DISTURB = 1	*Alarm*
		Green	-	*Normal*
3.1	**Section Text**	Section Grey		*Text in front of the value*
3.2	**Section Value**	Green	PROC_SEC	*Process section*
4.1	**Class Text**	Class Grey		*Text in front of the value*
4.2	**Class Value**	Green	CLASS	*Object class*

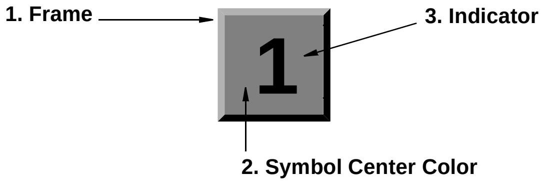
No	Description	Presentation	Condition	Remarks
5.1	**Member Name**		GRPMEMB: OBJECT	
		Yellow	GRPMEMB: BLOCKED = 1	
		Red	GRPMEMB: DISTURB = 1	
		Green	-	
		Grey	-	*Member object not resolved.*
		Black	-	*Database error: GROUP_MEMB instance not found*
5.2	**Action Status**	**Al** Grey	GRPMEMB: ACTION = 0	
		Ac Grey	GRPMEMB: ACTION = 1	
		Bc Grey	GRPMEMB: ACTION = 2	
		No Grey	GRPMEMB: ACTION = 3	
		-	GRPMEMB: ACTION < 0 and GRPMEMB: ACTION > 4	*Invisible*
5.3	**Member Status**	***** Yellow	GRPMEMB: F_UPx = 1	
		B Yellow	GRPMEMB: BLOCKED = 1	
		F Red	GRPMEMB: DISTURB = 1	
		-	-	*Invisible*
6	**GROUP STATUS**			*Group Status*
6.1	**Disturbance Indication**	■ Red flashing	AL_UNACK = 1	*Unacknowledged*
		■ Red	DISTURB = 1	*Alarm*
6.2	**Disturbance Text**	**Disturbance**		*Text behind the indication*
		Red	AL_UNACK = 1 or DISTURB = 1	
		Grey	-	
7.1	**Alarm Block Indication**	■ Yellow	AL_BLK = 1	*Alarm blocked by operator*
7.2	**Alarm Block Text**	**Alarm Block**		*Text behind the indication*
		Yellow	AL_BLK = 1	
		Grey	-	
8.1	**Printout Block Indication**	■ Yellow	PR_BLK = 1	*Print block*
8.2	**Print Block Text**	**Print Block**		*Text behind the indication*
		Yellow	PR_BLK = 1	
		Grey	-	
9.1	**Alarm Period Block Indication**	■ Yellow	AL_P_BLK = 1	*Alarm blocked by PC-program*
9.2	**Alarm Period Block Text**	**Alarm Period Block**		*Text behind the indication*
		Yellow	AL_P_BLK = 1	
		Grey	-	

No	Description	Presentation	Condition	Remarks
10.1	**Repeat Fail Block Indication**	■ Yellow flashing	RP_F_BLK = 1	*Repeat Fail Block*
10.2	**Repeat Fail Block Text**	**Repeat Fail Block**		*Text behind the indication*
		Yellow	RP_F_BLK = 1	
		Grey	-	
11.1	**Second Fail Block Indication**	■ Yellow	SC_F_BLK = 1	*Second Fail Block*
11.2	**Second Fail Block Text**	**Second Fail Block**		*Text behind the indication*
		Yellow	SC_F_BLK = 1	
		Grey	-	
12.1	**No of Alarms Text**	**No of Alarms:** Grey		*Dist Counter*
12.2	**No of Alarms Value**	Red	DST_CNT > 0	
		Green	DST_CNT = 0	
13	**GROUP PARMETERS**			*Group Parameters*
13.1	**Implemented Indication**	■ Green	ACT = 1	*Implemented*
13.2	**Implemented Text**	**Implemented** Grey		*Implemented text*
14.1	**Group Member Indication**	■ Green	GRP_MEMB = 1	*Group Member*
14.2	**Group Member**	**Group Member** Grey		*Group Member text*
15.1	**Reason Text**	**Reason:** Grey		
15.2	**Reason Value**	**Alarm** Green	REASON = Alarm	
		Unack Green	REASON = Unack	
16.1	**Repeat Fail Control Indication**	■ Green	RP_F_CTL = 1	*Repeat Fail Control*
16.2	**Repeat Fail Control Text**	**Repeat Fail Control**		*Text behind the indication*
		Grey	-	
17.1	**Second Fail Control Indication**	■ Green	SC_F_CTL = 1	*Second Fail Control*
17.2	**Second Fail Control Text**	**Second Fail Control**		*Text behind the indication*
		Grey	-	
18	**GROUP MEMBER STATUS**			*Group Member Status*
18.1	**Prevent Event Indication**	■ Yellow	PREV_OP = 1 or PREV_PGM = 1 or PREV_EXT = 1	
18.2	**Prevent Event Text**	**Prevent Event:** Grey		
18.3	**Prevent Event Status Value**	**Op** Yellow	PREV_OP = 1	
		Pgm Yellow	PREV_PGM = 1	
		Ext Yellow	PREV_EXT = 1	
19.1	**Alarm Period Block Indication**	■ Yellow	M_AL_P_B = 1	
19.2	**Alarm Period Block Text**	**Alarm Period Block**		*Text behind the indication*
		Yellow	M_AL_P_B = 1	

No	Description	Presentation	Condition	Remarks
		Grey	-	
20.1	**Alarm Block Indication**	■ Yellow	M_AL_BLK = 1	
20.2	**Alarm Block Text**	**Alarm Block**		*Text behind the indication*
		Yellow	M_AL_BLK = 1	
		Grey	-	
21.1	**Printout Block Indication**	■ Yellow	M_PR_BLK = 1	
21.2	**Print Block Text**	**Print Block**		*Text behind the indication*
		Yellow	M_PR_BLK = 1	
		Grey	-	
22.1	**First Up Indication**	■ Yellow	F_UP_BLK = 1	
22.2	**First Up Text**	**First Up**		*Text behind the indication*
		Yellow	F_UP_BLK = 1	
		Grey	-	
23	**GROUP MEMBER PARAMETERS**			*Group Member Parameters*
23.1	**Deblk Delay Text**	**Deblk Delay:** Grey		
23.2	**Deblk Delay Value**	Green	DBLK_D_T	*Value*
24.1	**First Up Control Indication**	■ Green	F_UP_CTL = 1	
24.2	**First Up Control Text**	**First Up Control**		*Text behind the indication*
		Grey	-	
25.1	**Block Control Indication**	■ Green	BLK_CTL = 1	
25.2	**Block Control Text**	**Block Control**		*Text behind the indication*
		Grey	-	
26	**Page Numbering**	**Page** Grey		*The Display consists of three pages.*
		1(3) Grey		*1(3), 2(3) or 3(3)*
27	**ACKNOWLEDGMENT CONTROL**			*Acknowledgment Control*
27.1	**Group Auto Acknowledge Ind.**	■ Green	G_A_ACK = 1	*Group Auto Acknowledge*
27.2	**Group Auto Acknowledge Text**	**Group Auto Acknowledge** Grey		*Group Auto Acknowledge text*
28.1	**Member Auto Acknowledge Ind.**	■ Green	M_A_ACK = 1	*Member Auto Acknowledge*
28.2	**Member Auto Acknowledge Text**	**Member Auto Acknowledge** Grey		*Member Auto Acknowledge text*
29.1	**Alarm Indicator Text**	**Alarm Indicator** Grey		*Alarm Indicator text*
29.2	**Alarm Indicator Name**	Green	DST_NAME	*Alarm name*
30.1	**Unack Indicator Text**	**Unack Indicator** Grey		*Unack Indicator text*
30.2	**Unack Indicator Name**	Green	UA_NAME	*Unack name*

4.7.5 GAPD01

Presentation:



Behavior:

No	Description	Presentation	Condition	Remarks
1	**Select Frame**	White	SELECTED = 1	*Object select frame*
		Dotted Yellow	AL_BLK = 1	*Alarm blocked by operator*
		Dotted Yellow	SC_F_BLK = 1	*Second fail blocked*
		Black	-	
2	**Symbol Center Color**			*3D Display object*
		Red Flashing	AL_UNACK = 1	*Unacknowledged alarm*
		Red	DISTURB = 1	*Alarm*
		Green	-	NormalColor
3	**No of Alarms**			*No of Alarms*
		Black	VisNoOfAlarms = true and DST_CNT > 0	LabelColor and LabelFont
		-	VisNoOfAlarms = false	*Invisible*

The conditions are in priority order. Underlined parameters are configurable.

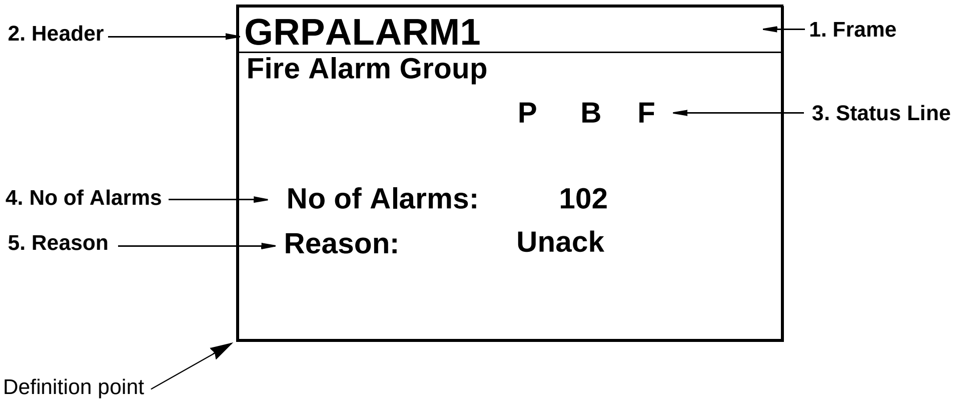
Configuration:

Parameters	Affects	Options (bold is default)	Remarks
NormalColor	2. Symbol	**K5** (Green), any color	*Center Color On*
LightNormalColor	2. Symbol	**L5** (Light Green), any color	
DarkNormalColor	2. Symbol	**M5** (Dark Green), any color	
VisNoOfAlarms	3. No of Alarms	**true**, false	
LabelFont	3. No of Alarms	**FC10**, any font	

Parameters	**Affects**	**Options (bold is default)**	**Remarks**
LabelColor	3. No of Alarms	**K16** (Black), any color	
FrameWidth	1. SelectFrame	**2**, (1..4)	

4.7.6 GAWI01

Presentation:



Behavior:

No	Description	Presentation	Condition	Remarks
1	**Select Frame**			*Object select frame*
		White	SELECTED = 1	*Only for overlap*
		Black	-	
2	**Header**		NAME and DESCR	*Object Name and Description*
		Red flashing	AL_UNACK = 1	*Unacknowledged*
		Red	DISTURB = 1	*Alarm*
		Green	-	*Normal*
3	**Status Line**			*Status Line*
3.1	**Printout Blocked**	**P** Yellow	PR_BLK = 1	*Printout blocked*
3.2	**Alarm Blocked**	**B** Yellow	AL_BLK = 1	*Alarm blocked by operator*
		Bx Yellow	AL_P_BLK = 1	*Alarm blocked by PC-program*
3.3	**Alarm Indication**	**F** Red	DISTURB = 1	*Alarm*
4.1	**No of Alarms Text**	**No of Alarms:** Grey		*Dist Counter*
4.2	**No of Alarms Value**	Red	DST_CNT > 0	
		Green	DST_CNT = 0	
5.1	**Reason**	**Reason:** Grey		
5.2	**Reason value**	**Alarm** Green	REASON = Alarm	
		Unack Green	REASON = Unack	

4.8 Process Dialog for Binary Object GENBIN

4.8.1 MIN Dialog (No authority key)

4.8.1.1 Keyboard keys

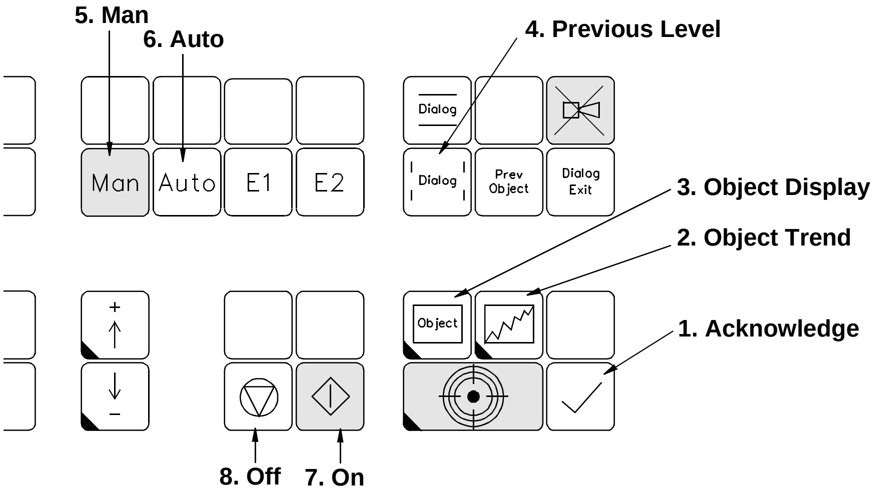


Figure 4-29. Keyboard keys

Key 1: Acknowledge	Perform: Acknowledge	AL_UNACK = 0
Key 2: Object Trend	Select: Object Trend	
Key 3: Object Display	Select: Object Display	
Key 4: Previous Level	Select Dynamic keys: Top Level	
Key 5: Man	Perform: Set to manual mode	MORD_04 = 1 / ORDMAN = 1
Key 6: Auto	Perform: Set to automatic mode	MORD_05 = 1 / ORDAUTO = 1
Key 7: On	Perform: Set to open order	MORD_08 = 1 / ORDONOP = 1
Key 8: Off	Perform: Set to close order	MORD_09 = 1 / ORDOFCL = 1

4.8.1.2 Dynamic keys, Top Level

D1 Central	D2 Local	D3 Remote	D4 Standby	D5 Blocked
D6	D7	D8	D9	D10 Keyboard...

Figure 4-30. Dynamic keys

D1: Central	Perform: Set to Central control mode	MORD_01 = 1 / ORDCEN = 1
D2: Local	Perform: Set to Local control mode	MORD_02 = 1 / ORDLOC = 1
D3: Remote	Perform: Set to Remote control mode	MORD_03 = 1 / ORDREM = 1
D4: Standby	Perform: Set to Standby	MORD_07 = 1 / ORDSTBY = 1
D5: Blocked	Perform: Set to Blocked control mode	MORD_06 = 1 / ORDBLK = 1
D10:Keyboard...	Select Dynamic keys: Keyboard	

4.8.1.3 Dynamic keys, Keyboard

D1 ■ On	D2 Man	D3 Auto	D4	D5
D6 □ Off	D7 Acknowledge	D8 Object Display	D9 Object Trend	D10

Figure 4-31. Dynamic keys

D1: On	Perform: Set to open order	MORD_08 = 1 / ORDONOP = 1
D2: Man	Perform: Set to manual mode	MORD_04 = 1 / ORDMAN = 1
D3: Auto	Perform: Set to automatic mode	MORD_05 = 1 / ORDAUTO = 1
D6: Off	Perform: Set to close order	MORD_09 = 1 / ORDOFCL = 1
D7: Acknowledge	Perform: Acknowledge	AL_UNACK = 0
D8: Object Display	Select: Object Display	
D9: Object Trend	Select: Object Trend	

4.8.2 MAX Dialog (Authority key)

4.8.2.1 Keyboard keys

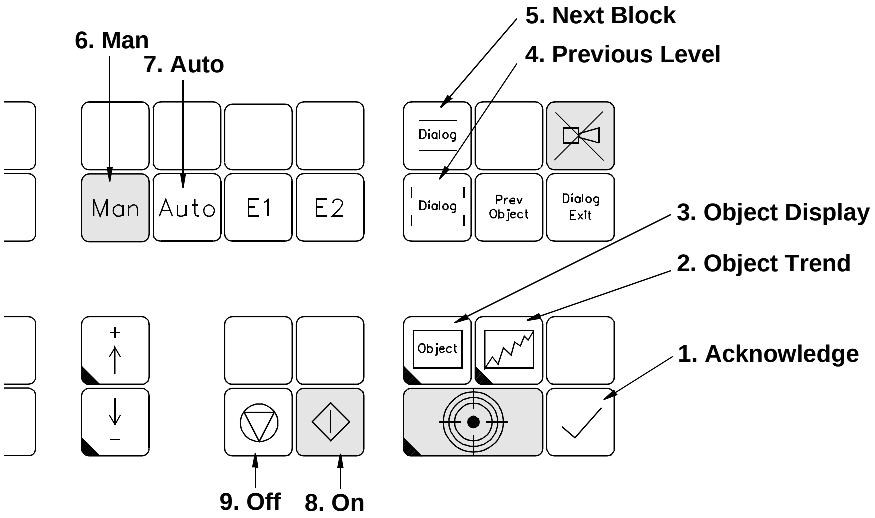


Figure 4-32. Keyboard keys

Key 1: Acknowledge	Perform: Acknowledge	AL_UNACK = 0
Key 2: Object Trend	Select: Object Trend	
Key 3: Object Display	Select: Object Display	
Key 4: Previous Level	Select Dynamic keys: Top Level	
Key 5: Next Block	Page between the dynamic key sets: Block, Limits and Keyboard	
Key 6: Man	Perform: Set to manual mode	MORD_04 = 1 / ORDMAN = 1
Key 7: Auto	Perform: Set to automatic mode	MORD_05 = 1 / ORDAUTO = 1
Key 8: On	Perform: Set to open order	MORD_08 = 1 / ORDONOP = 1
Key 9: Off	Perform: Set to close order	MORD_09 = 1 / ORDOFCL = 1

4.8.2.2 Dynamic keys, Top Level

D1 Central	D2 Local	D3 Remote	D4 Standby	D5 Blocked
D6	D7	D8 Block...	D9 Limits....	D10 Keyboard...

Figure 4-33. Dynamic keys

D1: Central	Perform: Set to Central control mode	MORD_01 = 1 / ORDCEN = 1
D2: Local	Perform: Set to Local control mode	MORD_02 = 1 / ORDLOC = 1
D3: Remote	Perform: Set to Remote control mode	MORD_03 = 1 / ORDREM = 1
D4: Standby	Perform: Set to Standby	MORD_07 = 1 / ORDSTBY = 1
D5: Blocked	Perform: Set to Blocked control mode	MORD_06 = 1 / ORDBLK = 1
D8: Block...	Select Dynamic keys: Block	
D9: Limits...	Select Dynamic keys: Limits	
D10:Keyboard...	Select Dynamic keys: Keyboard	

4.8.2.3 Dynamic keys, Keyboard

D1 ■ On	D2 Man	D3 Auto	D4	D5
D6 ☐ Off	D7 Acknowledge	D8 Object Display	D9 Object Trend	D10

Figure 4-34. Dynamic keys

D1: On	Perform: Set to open order	MORD_08 = 1 / ORDONOP = 1
D2: Man	Perform: Set to manual mode	MORD_04 = 1 / ORDMAN = 1
D3: Auto	Perform: Set to automatic mode	MORD_05 = 1 / ORDAUTO = 1
D6: Off	Perform: Set to close order	MORD_09 = 1 / ORDOFCL = 1
D7: Acknowledge	Perform: Acknowledge	AL_UNACK = 0
D8: Object Display	Select: Object Display	
D9: Object Trend	Select: Object Trend	

4.8.2.4 Dynamic keys, Block

D1 Block Alarm	D2 Block Printout	D3 Block Event	D4	D5
D6 Deblock Alarm	D7 Deblock Printout	D8 Deblock Event	D9	D10

Figure 4-35. Dynamic keys

D1: Block Alarm	Pressed: yellow text Released: white text	AL_BLK = 1
D2: Block Printout	Pressed: yellow text Released: white text	PR_BLK = 1
D3: Block Event	Pressed: yellow text Released: white text	EV_BLK = 1
D6: Deblock Alarm	Pressed: green text Released: white text	AL_BLK = 0
D7: Deblock Printout	Pressed: green text Released: white text	PR_BLK = 0
D8: Deblock Event	Pressed: green text Released: white text	EV_BLK = 0

4.8.2.5 Dynamic keys, Limits

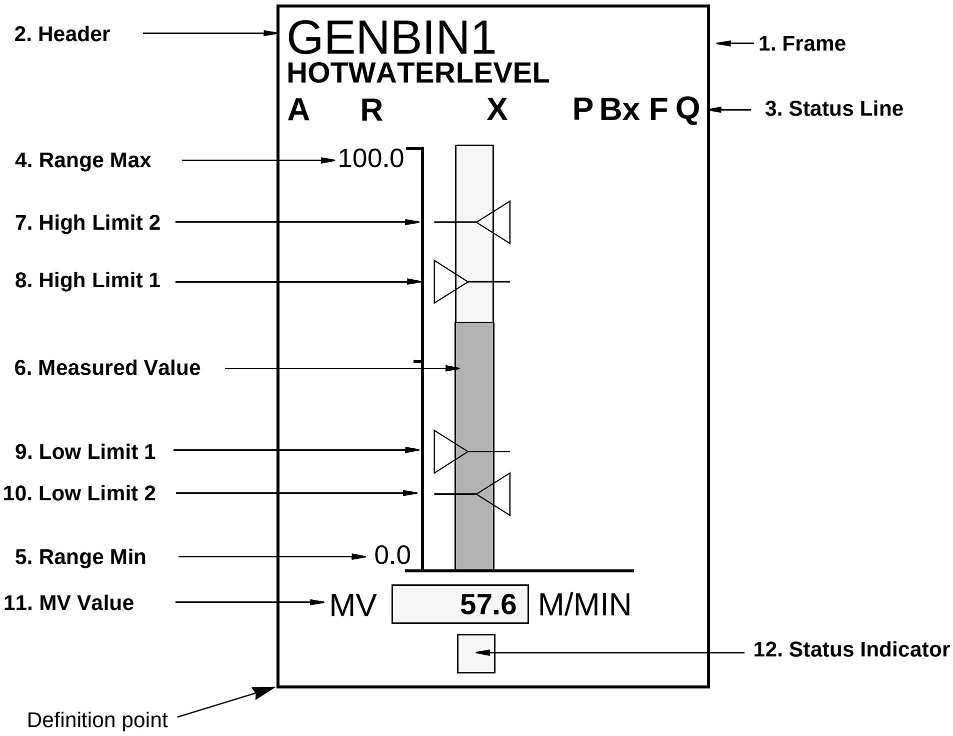
D1 H1 70	D2 H2 80	D3	D4	D5
D6 L1 45	D7 L2 30	D8	D9	D10

Figure 4-36. Dynamic keys

D1: H1	Pressed: Dialog for changing High Limit 1, value green	MVH1
D2: H2	Pressed: Dialog for changing High Limit 2, value green	MVH2
D6: L1	Pressed: Dialog for changing Low Limit 1, value green	MVL1
D7: L2	Pressed: Dialog for changing Low Limit 2, value green	MVL2

4.8.3 GBIGR01

Presentation:



Behavior:

No	Description	Presentation	Condition	Remarks
1	**SelectFrame**	White	SELECTED = 1	*Object select frame*
		Black	-	
2	**Header**		NAME and DESCR	*Object name and description*
		Red flashing	AU_ST_00 = 1 or AU_ST_01 = 1 or AU_ST_04 = 1 or AU_ST_05 = 1 or AU_ST_06 = 1 or AU_ST_07 = 1	*Unacknowledged signal error* *UnAck alarm feedback error* *UnAck alarm high limit 2* *UnAck alarm high limit 1* *UnAck alarm low limit 1* *UnAck alarm low limit 2*
		Red	ALSIGNE = 1 or ALFBE = 1 or ALLIMH2 = 1 or ALLIMH1 = 1 or ALLIML1 = 1 or ALLIML2 = 1	*Signal error* *Alarm feedback error* *Alarm high limit 2* *Alarm high limit 1* *Alarm low limit 1* *Alarm low limit 2*
		Green	-	*Normal*

No	Description	Presentation	Condition	Remarks
3	**Status Line**			*Status Line*
3.1	**Mode**	**M** Green	MAN = 1	*Manual mode* ManModeColor
		A Green	AUTO = 1	*Auto mode*
		B Green	BLK = 1	*Blocked mode*
		S Green	STBY = 1	*Standby mode*
3.2	**Operator Position**	**C** Green	CEN = 1	*Central control*
		L Green	LOC = 1	*Local control*
		R Green	REM = 1	*Remote control*
3.3	**Interlock Indication**	**X** Yellow	INTMODE = 1 or NTPROC = 1 or INTSWGR = 1 or INTEMTP = 1	*Interlock mode* *Interlock process* *Interlock switchgear* *Interlock emergency trip*
3.4	**Printout Blocked**	**P** Yellow	PR_BLK = 1	*Printout blocked*
3.5	**Alarm Blocked**	**B** Yellow	AL_BLK = 1	*Alarm blocked by operator*
		Bx Yellow	AUTO_BLK = 1	*Alarm blocked by PC-program*
		Be Yellow	EV_BLK = 1	*Event blocked*
3.6	**Alarm Indication**	**F** Red	ALFBE = 1 or ALLIMH2 = 1 or ALLIMH1 = 1 or ALLIML1 = 1 or ALLIML2 = 1	*Alarm feedback error* *Alarm high limit 2* *Alarm high limit 1* *Alarm low limit 1* *Alarm low limit 2*
3.7	**Signal Error Indication**	**Q** Red	ALSIGNE = 1	*Signal error*
4	**Range Max**		MAX	*Range Max of the MV value*
		Green	-	
5	**Range Min**		MIN	*Range Min of the MV value*
		Green	-	
6	**Measured Value Bargraph**		MV	*Object measured value*
		Green	-	

No	Description	Presentation	Condition	Remarks
7	**High Limit 2**		MVH2	*Alarm High limit 2*
	—◁	-	MVH2 >= MAX	*Invisible*
		Filled Yellow	ALLIMH2 = 1 and AL_BLK = 1	
		Unfilled Yellow	AL_BLK = 1	
		Filled Red flashing	ALLIMH2 = 1 and AU_ST_04 = 1	
		Unfilled Red flashing	AU_ST_04 = 1	
		Filled Red	ALLIMH2 = 1	
		Unfilled Grey	-	
8	**High Limit 1**		MVH1	*Warning High limit 1*
	▷—	-	MVH1 >= MAX	*Invisible*
		Filled Yellow	ALLIMH1 = 1 and AL_BLK = 1	
		Unfilled Yellow	AL_BLK = 1	
		Filled Red flashing	ALLIMH1 = 1 and AU_ST_05 = 1	
		Unfilled Red flashing	AU_ST_05 = 1	
		Filled Red	ALLIMH1 = 1	
		Unfilled Grey	-	
9	**Low Limit 1**		MVL1	*Warning Low limit 1*
	▷—	-	MVL1 <= MIN	*Invisible*
		Filled Yellow	ALLIML1 = 1 and AL_BLK = 1	
		Unfilled Yellow	AL_BLK = 1	
		Filled Red flashing	ALLIML1 = 1 and AU_ST_06 = 1	
		Unfilled Red flashing	AU_ST_06 = 1	
		Filled Red	ALLIML1 = 1	
		Unfilled Grey	-	
10	**Low Limit 2**		MVL2	*Alarm Low limit 2*
	—◁	-	MVL2 <= MIN	*Invisible*
		Filled Yellow	ALLIML2 = 1 and AL_BLK = 1	
		Unfilled Yellow	AL_BLK = 1	
		Filled Red flashing	ALLIML2 = 1 and AU_ST_07 = 1	
		Unfilled Red flashing	AU_ST_07 = 1	
		Filled Red	ALLIML2 = 1	
		Unfilled Grey	-	

No	Description	Presentation	Condition	Remarks
11	**Measured Value**			*The MV object value*
11.1	**MV**	**MV** Grey		*Text in front of the value*
11.2	**MV Value**	**? ? ?** Red	ALSIGNE = 1	*Signal error*
		Green	MV	*Measured value*
11.3	**MV Unit**		UNIT	*Measured unit*
		Green	-	
12	**Status Indication**			*Status - Square indication*
		Unfilled Green Flashing	INDONOP = 1 and INDCH = 1	*Off*
		Unfilled Green	INDONOP = 0 and INDCH = 0	*Off*
		Filled Green Flashing	INDONOP = 0 and INDCH = 1	*On*
		Filled Green	INDONOP = 1 and INDCH = 0	*On*

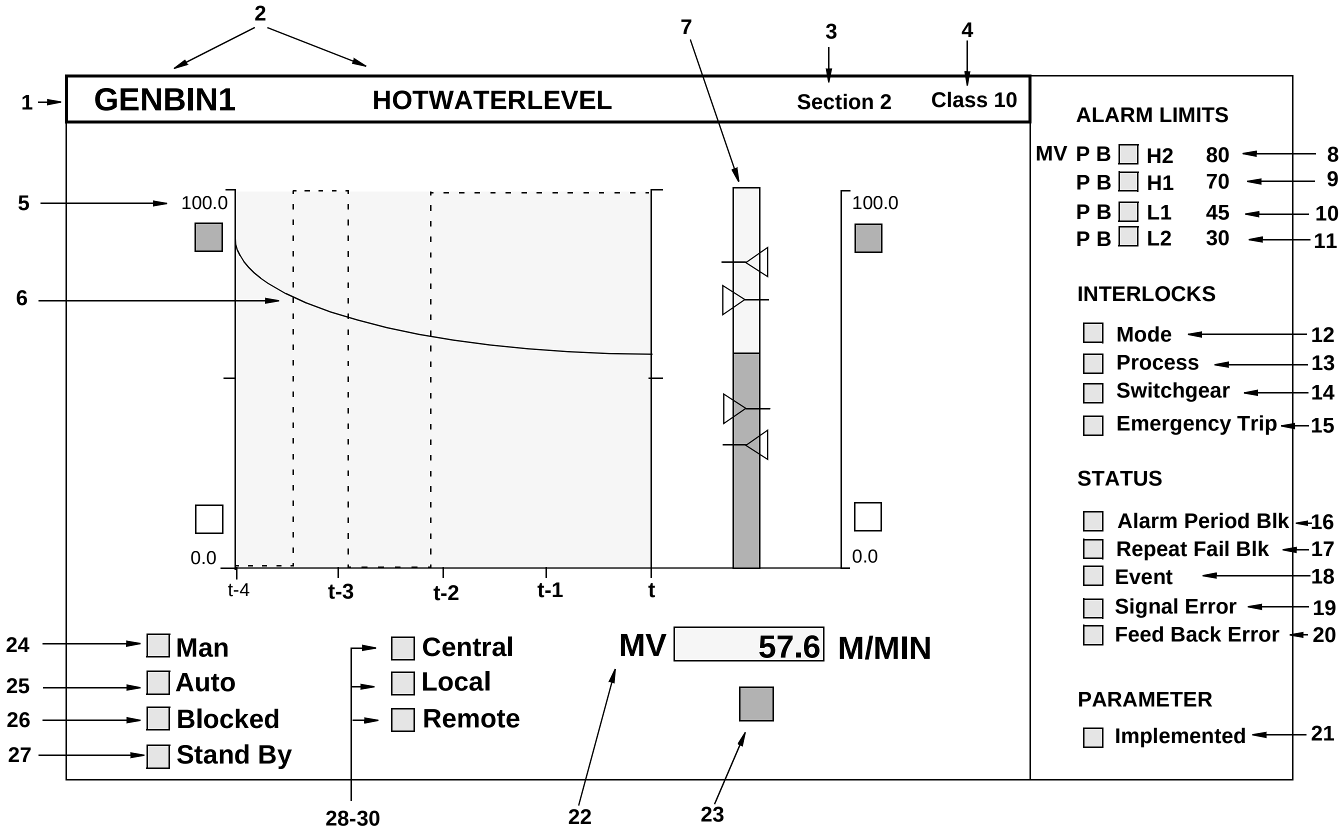
The conditions are in priority order. Underlined parameters are configurable.

Configuration:

Parameters	Affects	Options (bold is default)	Remarks
NameFont	2. Header Name	**FC50**, any font	
ManModeColor	3.1 Mode	**K5** (Green), any color	

4.8.4 GBIOB01

Presentation:



Behavior:

No	Description	Presentation	Condition	Remarks
1	**SelectFrame**	White	SELECTED = 1	*Object select frame*
		Black	-	
2	**Header**		NAME and DESCR	*Object name and description*
		Red flashing	AU_ST_00 = 1 or AU_ST_01 = 1 or AU_ST_04 = 1 or AU_ST_05 = 1 or AU_ST_06 = 1 or AU_ST_07 = 1	*Unacknowledged signal error* *UnAck alarm feedback error* *UnAck alarm high limit 2* *UnAck alarm high limit 1* *UnAck alarm low limit 1* *UnAck alarm low limit 2*
		Red	ALSIGNE = 1 or ALFBE = 1 or ALLIMH2 = 1 or ALLIMH1 = 1 or ALLIML1 = 1 or ALLIML2 = 1	*Signal error* *Alarm feedback error* *Alarm high limit 2* *Alarm high limit 1* *Alarm low limit 1* *Alarm low limit 2*
		Green	-	*Normal*

No	Description	Presentation	Condition	Remarks
3.1	**Section Text**	**Section** Grey		*Text in front of the value*
3.2	**Section Value**	Green	PROC_SEC	*Process section*
4.1	**Class Text**	**Class** Grey		*Text in front of the value*
4.2	**Class Value**	Green	CLASS	*Object class*
5	**Range Max**		MAX	*Range Max of the MV value*
		Green	-	
	Range Min		MIN	*Range Min of the MV value*
		Green	-	
6	**Measure Value Trim Curve**		MV	*Object value - Trim curve*
		Green	-	
	Status Indication		INDONOP	*Status indication - On / Off*
		Green	-	
7.1	**Measured Value Bargraph**		MV	*Object value - Bargraph*
		Green	-	
7.2	**High Limit 2**		MVH2	*Alarm High limit 2*
	—◁	-	MVH2 >= MAX	*Invisible*
		Filled Yellow	ALLIMH2 = 1 and AL_BLK = 1	
		Unfilled Yellow	AL_BLK = 1	
		Filled Red flashing	ALLIMH2 = 1 and AU_ST_04 = 1	
		Unfilled Red flashing	AU_ST_04 = 1	
		Filled Red	ALLIMH2 = 1	
		Unfilled Grey	-	
7.3	**High Limit 1**		MVH1	*Warning High limit 1*
	▷—	-	MVH1 >= MAX	*Invisible*
		Filled Yellow	ALLIMH1 = 1 and AL_BLK = 1	
		Unfilled Yellow	AL_BLK = 1	
		Filled Red flashing	ALLIMH1 = 1 and AU_ST_05 = 1	
		Unfilled Red flashing	AU_ST_05 = 1	
		Filled Red	ALLIMH1 = 1	
		Unfilled Grey	-	

No	Description	Presentation	Condition	Remarks
7.4	**Low Limit 1**		MVL1	*Warning Low limit 1*
	▷—	-	MVL1 <= MIN	*Invisible*
		Filled Yellow	ALLIML1 = 1 and AL_BLK = 1	
		Unfilled Yellow	AL_BLK = 1	
		Filled Red flashing	ALLIML1 = 1 and AU_ST_06 = 1	
		Unfilled Red flashing	AU_ST_06 = 1	
		Filled Red	ALLIML1 = 1	
		Unfilled Grey	-	
7.5	**Low Limit 2**		MVL2	*Alarm Low limit 2*
	—◁	-	MVL2 <= MIN	*Invisible*
		Filled Yellow	ALLIML2 = 1 and AL_BLK = 1	
		Unfilled Yellow	AL_BLK = 1	
		Filled Red flashing	ALLIML2 = 1 and AU_ST_07 = 1	
		Unfilled Red flashing	AU_ST_07 = 1	
		Filled Red	ALLIML2 = 1	
		Unfilled Grey	-	
8	**ALARM LIMITS for MV**			*Alarm limits for MV*
8.1	**Printout Blocked**	**P** Yellow	PR_BLK = 1	*Printout blocked*
8.2	**Alarm Blocked**	**B** Yellow	AL_BLK = 1	*Alarm blocked by operator*
		Bx Yellow	AUTO_BLK = 1	*Alarm blocked by PC-program*
8.3	**Alarm Indication**	■ Red flashing	ALLIMH2 = 1 and AU_ST_04 = 1	*Alarm High limit 2*
		■ Red	ALLIMH2 = 1	
8.4	**H2 Text**	**H2** Grey		*Text in front of the value*
8.5	**H2 Value**		MVH2	*High limit 2 value*
		Green	-	
9.1	**Printout Blocked**	**P** Yellow	PR_BLK = 1	*Printout blocked*
9.2	**Alarm Blocked**	**B** Yellow	AL_BLK = 1	*Alarm blocked by operator*
		Bx Yellow	AUTO_BLK = 1	*Alarm blocked by PC-program*
9.3	**Warning Indication**	■ Red flashing	ALLIMH1 = 1 and AU_ST_05 = 1	*Warning High limit 1*
		■ Red	ALLIMH1 = 1	
9.4	**H1 Text**	**H1** Grey		*Text in front of the value*
9.5	**H1 Value**		MVH1	*High limit 1 value*
		Green	-	

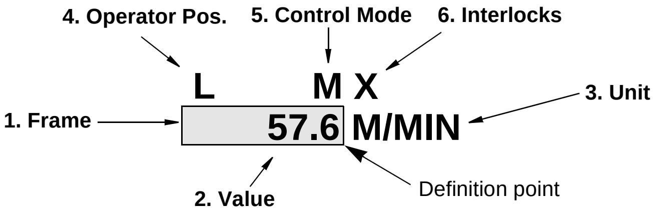
No	Description	Presentation	Condition	Remarks
10.1	**Printout Blocked**	**P** Yellow	PR_BLK = 1	*Printout blocked*
10.2	**Alarm Blocked**	**B** Yellow	AL_BLK = 1	*Alarm blocked by operator*
		Bx Yellow	AUTO_BLK = 1	*Alarm blocked by PC-program*
10.3	**Warning Indication**	■ Red flashing	ALLIML1 = 1 and AU_ST_06 = 1	*Warning Low limit 1*
		■ Red	ALLIML1 = 1	
10.4	**L1 Text**	**L1** Grey		*Text in front of the value*
10.5	**L1 Value**		MVL1	*Low limit1 value*
		Green	-	
11.1	**Printout Blocked**	**P** Yellow	PR_BLK	*Printout blocked*
11.2	**Alarm Blocked**	**B** Yellow	AL_BLK = 1	*Alarm blocked by operator*
		Bx Yellow	AUTO_BLK = 1	*Alarm blocked by PC-program*
11.3	**Alarm Indication**	■ Red flashing	ALLIML2 = 1 and AU_ST_07 = 1	*Alarm Low limit 2*
		■ Red	ALLIML2 = 1	
11.4	**L2 Text**	**L2** Grey		*Text in front of the value*
11.5	**L2 Value**		MVL2	*Low limit 2 value*
		Green	-	
12	**INTERLOCKS**			*Interlocks*
12.1	**Mode Interlock Indication**	■ Yellow	INTMODE = 1	*Mode interlock indication*
12.2	**Mode Interlock Text**	**Mode**		*Mode interlock text*
		Yellow	INTMODE = 1	
		Grey	-	
13.1	**Process Interlock Indication**	■ Yellow	INTPROC = 1	*Process interlock indication*
13.2	**Process Interlock Text**	**Process**		*Process interlock text*
		Yellow	INTPROC = 1	
		Grey	-	
14.1	**Switchgear Interlock Indication**	■ Yellow	INTSWGR = 1	*Switchgear interlock indication*
14.2	**Switchgear Interlock Text**	**Switchgear**		*Switchgear interlock text*
		Yellow	INTSWGR = 1	
		Grey	-	
15.1	**Emergency Trip Interlock Indication**	■ Yellow	INTEMTP = 1	*Emergency Trip interlock indication*
15.2	**Emergency Trip Interlock Text**	**Emergency Trip**		*Emergency Trip interlock text*
		Yellow	INTEMTP = 1	
		Grey	-	

No	Description	Presentation	Condition	Remarks
16	**STATUS**			*Status*
16.1	**Alarm Period Block Indication**	■ Yellow	AUTO_BLK = 1	*Alarm block by PC-program*
16.2	**Alarm Period Block Text**	**Alarm Period Blk**		*Alarm period block text*
		Yellow	AUTO_BLK = 1	
		Grey	-	
17.1	**Repeat Fail Block Indication**	■ Yellow	RP_BLK = 1	*Repeat fail block indication*
17.2	**Repeat Fail Block Text**	**Repeat Fail Blk**		*Repeat fail block text*
		Yellow	RP_BLK = 1	
		Grey	-	
18.1	**Event Indication**	■ Yellow	EV_BLK = 1	*Event indication*
18.2	**Event Text**	**Event** Yellow		*Event text*
		Yellow	EV_BLK = 1	
		Grey	-	
19.1	**Signal Error Indication**	■ Red Flashing	AU_ST_00 = 1	*Signal error indication*
		■ Red	ALSIGNE = 1	
19.2	**Signal Error Text**	**Signal Error**		*Signal error text*
		Red	AU_ST_00 = 1 or ALSIGNE = 1	
		Grey	-	
20.1	**Feed Back Error Indication**	■ Red Flashing	AU_ST_01 = 1	*Feed back error indication*
		■ Red	ALFBE = 1	
20.2	**Feed Back Error Text**	**Feed Back Error**		*Feed back error text*
		Red	AU_ST_01 = 1 or ALFBE = 1	
		Grey	-	
21	**PARAMETER**			*Parameter*
21.1	**Implemented Indication**	■ Green	IMPLEMENTED = 1	*Implemented indication*
21.2	**Implemented Text**	**Implemented** Grey		*Implemented text*

No	Description	Presentation	Condition	Remarks
22	**Measured Value**			*The MV object value*
22.1	**MV**	**MV** Grey		*Text in front of the value*
22.2	**MV Value**	**? ? ?** Red	ALSIGNE = 1	*Signal error*
			MV	*Measured value*
		Green	-	
22.3	**MV Unit**		UNIT	*Measured unit*
		Green	-	
23	**Status Indication**			*Status - Square indication*
		Unfilled Green Flashing	INDONOP = 1 and INDCH = 1	*Off*
		Unfilled Green	INDONOP = 0 and INDCH = 0	*Off*
		Filled Green Flashing	INDONOP = 0 and INDCH = 1	*On*
		Filled Green	INDONOP = 1 and INDCH = 0	*On*
24.1	**Man Indication**	■ Green	MAN = 1	*Manual mode*
24.2	**Man Text**	**Man** Green	MAN = 1	*Man text*
		Grey	-	
25.1	**Auto Indication**	■ Green	AUTO = 1	*Auto mode*
25.2	**Auto Text**	**Auto** Green	AUTO = 1	*Auto text*
		Grey	-	
26.1	**Blocked Indication**	■ Green	BLK = 1	*Blocked mode*
26.2	**Blocked Text**	**Blocked** Green	BLK = 1	*Blocked text*
		Grey	-	
27.1	**Stand By Indication**	■ Green	STBY = 1	*Stand by mode*
27.2	**Stand By Text**	**Stand By** Green	STBY = 1	*Stand by text*
		Grey	-	
28.1	**Central Control Indication**	■ Green	CEN = 1	*Central control indication*
28.2	**Central Control Text**	**Central** Green	CEN = 1	*Central control text*
		Grey	-	
29.1	**Local Control Indication**	■ Green	LOC = 1	*Local control indication*
29.2	**Local Control Text**	**Local** Green	LOC = 1	*Local control text*
		Grey	-	
30.1	**Remote Control Indication**	■ Green	REM = 1	*Remote control indication*
30.2	**Remote Control Text**	**Remote** Green	REM = 1	*Remote control text*
		Grey	-	

4.8.5 GBIPD01

Presentation:



Behavior:

No	Description	Presentation	Condition	Remarks
1	**SelectFrame**	White	SELECTED = 1	*Selected*
		Dotted Yellow	AL_BLK = 1	*Alarm blocked by operator*
		Black	-	FrameColor
2	**Measured Value**		MV	*Object value*
		? ? ? Red flashing	ALSIGNE = 1 and AU_ST_00 =1	*Unacknowledged signal error*
		Red flashing	AU_ST_01 = 1 or AU_ST_04 = 1 or AU_ST_05 = 1 or AU_ST_06 = 1 or AU_ST_07 = 1	*UnAck alarm feedback error* *UnAck alarm high limit 2* *UnAck alarm high limit 1* *UnAck alarm low limit 1* *UnAck alarm low limit 2*
		? ? ? Red	ALSIGNE = 1	*Signal error*
		Red	ALFBE = 1 or ALLIMH2 = 1 or ALLIMH1 = 1 or ALLIML1 = 1 or ALLIML2 = 1	*Alarm feedback error* *Alarm high limit 2* *Alarm high limit 1* *Alarm low limit 1* *Alarm low limit 2*
		Green	-	NormalColor
3	**Unit**		UnitVisible = onRequest	*Object unit*
		Green	UNIT	NormalColor
		-	UnitVisible = noSubscription	*Unit is invisible*
4	**Operator Position**		OperatorPosVisible = true	*Object mode*
		C Green	CEN = 1	*Central position* OperatorPosColor
		L Green	LOC = 1	*Local position* OperatorPosColor
		R Green	REM = 1	*Remote position* OperatorPosColor
		-	OperatorPosVisible = false	*Operator position is invisible*

No	Description	Presentation	Condition	Remarks
5	**Mode**		ModeVisible = true	*Object mode*
		M Green	MAN = 1	*Manual mode* ManModeColor
		A Green	AUTO = 1	*Auto mode* AutoModeColor
		B Green	BLK = 1	*Blocked mode* ModeColor
		S Green	STBY = 1	*Standby mode* ModeColor
		-	ModeVisible = false	*Mode is invisible*
6	**Interlocks**		InterLockVisible = true	*Object interlock*
		X Yellow	INTMODE = 1 or INTPROC = 1 or INTSWGR = 1 or INTEMTP = 1	*Interlock mode* *Interlock process* *Interlock switchgear* *Interlock emergency trip* InterLockColor
		-	InterLockVisible = false	*Interlock is invisible*

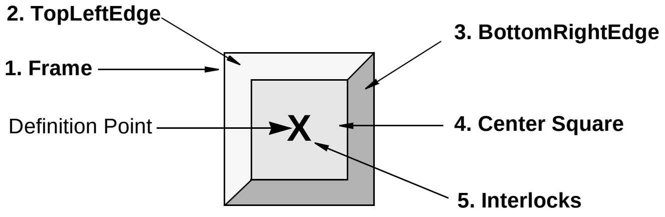
The conditions are in priority order. Underlined parameters are configurable.

Configuration:

Parameters	Affects	Options (bold is default)	Remarks
ModeVisible	5. Mode	**true**, false	
OperatorPosVisible	4. Operator Position	**true**, false	
InterlockVisible	6. Interlocks	**true**, false	
UnitVisible	3. Unit	**onRequest**, noSubscription	
NormalColor	2. Measured Value and 3. Unit	**K5** (Green), any color	
ModeColor	5. Mode	**K5** (Green), any color	
ManModeColor	5. Mode	**K5** (Green), any color	
AutoModeColor	5. Mode	**K5** (Green), any color	
OperatorPosColor	4. Operator Position	**K5** (Green), any color	
InterlockColor	6. Interlocks	**K3** (Yellow), any color	
SelectAreaColor	1. SelectArea	**K16** (Black), any color	*Background color and deletion color*
Font	2. Measured Value and 3 Unit	**FA40**, any font	
FrameColor	1. SelectFrame	**K16** (Black), any color	
FrameWidth	1. SelectFrame	**2**, (1..4)	
NumberOfChar	2. Measured Value	**7**	*Include "**.**" and "**-**"*
UseDisplayColor	5. Mode	**false**, true	*true if DisplayColor used*
DisplayColor	5. Mode	**N13** (Black), any color	*Bg color for Mode if UseDisplay-Color is true*

4.8.6 GBIPD02

Presentation:



Behavior:

No	Description	Presentation	Condition	Remarks
1	**SelectFrame**	White	SELECTED = 1	*Selected*
		Dotted Yellow	AL_BLK = 1	*Alarm blocked by operator*
		Black	-	
2	**TopLeftEdge**			*Top left of the 3-D frame*
		Green flashing	INDCH = 1	*TopLeftFlashingColor*
		Dark Green	INDONOP = 0 and INDCH = 0	*Off* BottomRightColor
		Light Green	-	*On* TopLeftColor
3	**BottomRightEdge**			*Bottom right of the 3-D frame*
		Green flashing	INDCH = 1	BottomRightFlashingColor
		Light Green	INDONOP = 0 and INDCH = 0	*Off* TopLeftColor
		Dark Green	-	*On* BottomRightColor
4	**Center Square**			
		Black	INDONOP = 1 and INDCH = 1 INDONOP = 0 and INDCH = 0	*Off* OffColor
		Red flashing	AU_ST_00 = 1 or AU_ST_01 = 1 or AU_ST_04 = 1 or AU_ST_05 = 1 or AU_ST_06 = 1 or AU_ST_07 = 1	*Unacknowledged signal error* *UnAck alarm feedback error* *UnAck alarm high limit 2* *UnAck alarm high limit 1* *UnAck alarm low limit 1* *UnAck alarm low limit 2* *AlarmFlashingColor*
		Red	ALSIGNE = 1 or ALFBE = 1 or ALLIMH2 = 1 or ALLIMH1 = 1 or ALLIML1 = 1 or ALLIML2 = 1	*Signal error* *Alarm feedback error* *Alarm high limit 2* *Alarm high limit 1* *Alarm low limit 1* *Alarm low limit 2* *AlarmColor*
		Green flashing	INDCH = 1 and INDONOP = 0	OnFlashingColor
		Green	-	*On* OnColor

No	Description	Presentation	Condition	Remarks
5	**Interlocks**			*Object interlock*
		X Yellow	INTMODE = 1 or INTPROC = 1 or INTSWGR = 1 or INTEMTP = 1	*Interlock mode* *Interlock process* *Interlock switchgear* *Interlock emergency trip* InterlockColor and Font

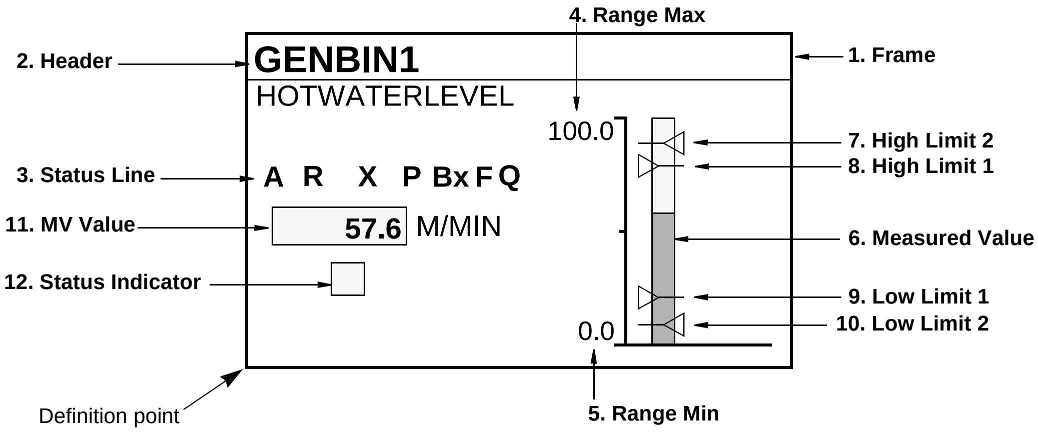
The conditions are in priority order. Underlined parameters are configurable.

Configuration:

Parameters	Affects	Options (bold is default)	Remarks
TopLeftColor	2. TopLeftEdge and 3. BottomRightEdge	**L5** (Light Green), any color	*Top frame color*
BottomRightColor	2. TopLeftEdge and 3. BottomRightEdge	**M5** (Dark Green), any color	*Bottom frame color*
OnColor	4. Center Square	**K5** (Green), any color	*Center square color*
OffColor	4. Center Square	**K16** (Black), any color	*Background color of the square*
TopLeftFlashingColor	2. TopLeftEdge	**N5** (Flashing Green), any color	
BottomRightFlashingColor	3. BottomRightEdge	**N5** (Flashing Green), any color	
OnFlashingColor	4. Center Square	**N5** (Flashing Green), any color	
TopLeftAlarmColor	2. TopLeftEdge	**L1** (Light Red), any color	
BottomRightAlarmColor	3. BottomRightEdge	**M1** (Red), any color	
AlarmColor	4. Center Square	**K1** (Red), any color	
AlarmFlashingColor	4. Center Square	**N1** (Flashing Red), any color	
Font	5. Interlocks	**FC40**, any font	
InterlockColor	5. Interlocks	**K3** (Yellow), any color	
FrameWidth	1. SelectFrame	**2**, (1..4)	

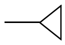
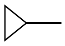
4.8.7 GBIWI01

Presentation:



Behavior:

No	Description	Presentation	Condition	Remarks
1	**Select Frame**			*Object select frame*
		White	SELECTED = 1	*Only for overlap*
		Black	-	
2	**Header**		NAME and DESCR	*Object name and description*
		Red flashing	AU_ST_00 = 1 or AU_ST_01 = 1 or AU_ST_04 = 1 or AU_ST_05 = 1 or AU_ST_06 = 1 or AU_ST_07 = 1	*Unacknowledged signal error* *UnAck alarm feedback error* *UnAck alarm high limit 2* *UnAck alarm high limit 1* *UnAck alarm low limit 1* *UnAck alarm low limit 2*
		Red	ALSIGNE = 1 or ALFBE = 1 or ALLIMH2 = 1 or ALLIMH1 = 1 or ALLIML1 = 1 or ALLIML2 = 1	*Signal error* *Alarm feedback error* *Alarm high limit 2* *Alarm high limit 1* *Alarm low limit 1* *Alarm low limit 2*
		Green	-	
3	**Status Line**			*Status Line*
3.1	**Mode**	**M** Green	MAN = 1	*Manual mode*
		A Green	AUTO = 1	*Auto mode*
		B Green	BLK = 1	*Blocked mode*
		S Green	STBY = 1	*Standby mode*
3.2	**Operator Position**	**C** Green	CEN = 1	*Central control*
		L Green	LOC = 1	*Local control*
		R Green	REM = 1	*Remote control*

No	Description	Presentation	Condition	Remarks
3.3	**Interlock Indication**	**X** Yellow	INTMODE = 1 or	*Interlock mode*
			INTPROC = 1 or	*Interlock process*
			INTSWGR = 1 or	*Interlock switchgear*
			INTEMTP = 1	*Interlock emergency trip*
3.4	**Printout Blocked**	**P** Yellow	PR_BLK = 1	*Printout blocked*
3.5	**Alarm Blocked**	**B** Yellow	AL_BLK = 1	*Alarm blocked by operator*
		Bx Yellow	AUTO_BLK = 1	*Alarm blocked by PC-program*
		Be Yellow	EV_BLK = 1	*Event blocked*
3.6	**Alarm Indication**	**F** Red	ALFBE = 1 or	*Alarm feedback error*
			ALLIMH2 = 1 or	*Alarm high limit 2*
			ALLIMH1 = 1 or	*Alarm high limit 1*
			ALLIML1 = 1 or	*Alarm low limit 1*
			ALLIML2 = 1	*Alarm low limit 2*
3.7	**Signal Error Indication**	**Q** Red	ALSIGNE = 1	*Signal error*
4	**Range Max**		MAX	*Range Max of the MV value*
		Green	-	
5	**Range Min**		MIN	*Range Min of the MV value*
		Green	-	
6	**Measured Value Bargraph**		MV	*Object measured value*
		Green	-	
7	**High Limit 2**		MVH2	*Alarm High limit 2*
		-	MVH2 >= MAX	*Invisible*
		Filled Yellow	ALLIMH2 = 1 and AL_BLK = 1	
		Unfilled Yellow	AL_BLK = 1	
		Filled Red flashing	ALLIMH2 = 1 and AU_ST_04 = 1	
		Unfilled Red flashing	AU_ST_04 = 1	
		Filled Red	ALLIMH2 = 1	
		Unfilled Grey	-	
8	**High Limit 1**		MVH1	*Warning High limit 1*
		-	MVH1 >= MAX	*Invisible*
		Filled Yellow	ALLIMH1 = 1 and AL_BLK = 1	
		Unfilled Yellow	AL_BLK = 1	
		Filled Red flashing	ALLIMH1 = 1 and AU_ST_05 = 1	
		Unfilled Red flashing	AU_ST_05 = 1	
		Filled Red	ALLIMH1 = 1	
		Unfilled Grey	-	

No	Description	Presentation	Condition	Remarks
9	**Low Limit 1**		MVL1	*Warning Low limit 1*
	▷—	-	MVL1 <= MIN	*Invisible*
		Filled Yellow	ALLIML1 = 1 and AL_BLK = 1	
		Unfilled Yellow	AL_BLK = 1	
		Filled Red flashing	ALLIML1 = 1 and AU_ST_06 = 1	
		Unfilled Red flashing	AU_ST_06 = 1	
		Filled Red	ALLIML1 = 1	
		Unfilled Grey	-	
10	**Low Limit 2**		MVL2	*Alarm Low limit 2*
	—◁	-	MVL2 <= MIN	*Invisible*
		Filled Yellow	ALLIML2 = 1 and AL_BLK = 1	
		Unfilled Yellow	AL_BLK = 1	
		Filled Red flashing	ALLIML2 = 1 and AU_ST_07 = 1	
		Unfilled Red flashing	AU_ST_07 = 1	
		Filled Red	ALLIML2 = 1	
		Unfilled Grey	-	
11	**Measured Value**			*The MV object value*
11.1	**MV**	**MV** Grey		*Text in front of the value*
11.2	**MV Value**	**? ? ?** Red	ALSIGNE = 1	*Signal error*
		Green	MV	*Measured value*
11.3	**MV Unit**		UNIT	*Measured unit*
		Green	-	
12	**Status Indication**			*Status - Square indication*
		Unfilled Green Flashing	INDONOP = 1 and INDCH = 1	*Off*
		Unfilled Green	INDONOP = 0 and INDCH = 0	*Off*
		Filled Green Flashing	INDONOP = 0 and INDCH = 1	*On*
		Filled Green	INDONOP = 1 and INDCH = 0	*On*

4.9 Process Dialog for User Defined Controller GENCON

4.9.1 MIN Dialog (No authority key)

4.9.1.1 Keyboard keys

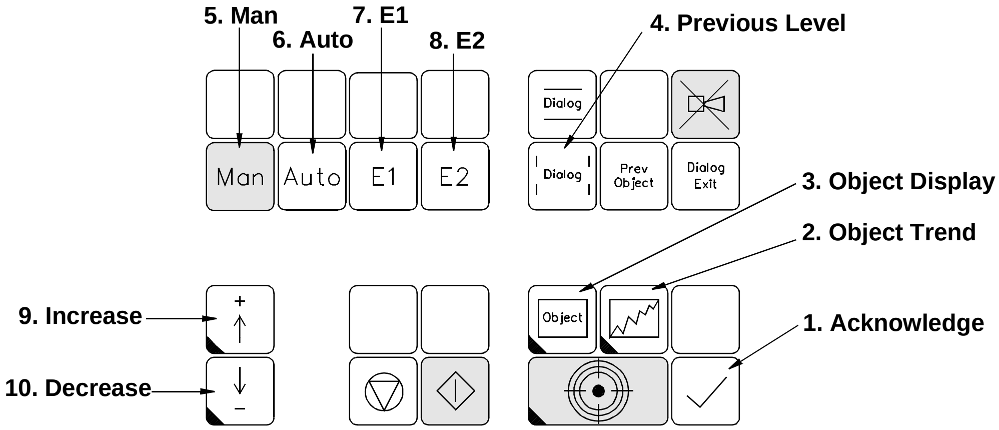


Figure 4-37. Keyboard keys

Key 1: Acknowledge	Perform: Acknowledge	AL_UNACK = 0
Key 2: Object Trend	Select: Object Trend	
Key 3: Object Display	Select: Object Display	
Key 4: Previous Level	Select Dynamic keys: Top Level	
Key 5: Man	Perform: Set to manual mode	MORD_03 = 1 / ORDMAN = 1
Key 6: Auto	Perform: Set to automatic mode	MORD_04 = 1 / ORDAUTO = 1
Key 7: E1	Perform: Set to external1 mode	MORD_05 = 1 / ORDE1 = 1
Key 8: E2	Perform: Set to external2 mode	MORD_06 = 1 / ORDE2 = 1
Key 9: Increase	Perform: Increase output value with 0.5 if MAN = 1 Increase setpoint value with 0.5 %	MANOUT SETP
Key 9: Shift + Increase	Perform: Increase output value with 5.0 if MAN = 1 Increase setpoint value with 5.0 %	MANOUT SETP
Key 10: Decrease	Perform: Decrease output value with 0.5 if MAN = 1 Decrease setpoint value with 0.5 %	MANOUT SETP
Key 10: Shift + Decrease	Perform: Decrease output value with 5.0 if MAN = 1 Decrease setpoint value with 5.0%	MANOUT SETP

4.9.1.2 Dynamic keys, Top Level

D1 Man Forced	D2	D3	D4	D5
D6 OUT	D7 SP	D8	D9	D10 Keyboard...

Figure 4-38. Dynamic keys

D1: Man Forced	Perform: Set to manual forced mode Pressed: green text Released: white text	MORD_02 = 1 / ORDMANF = 1
D6: OUT	Pressed: Dialog for changing Output value, value magenta	MANOUT
D7: SP	Pressed: Dialog for changing Setpoint value, value cyan	SETP
D10: Keyboard...	Select Dynamic keys: Keyboard	

4.9.1.3 Dynamic keys, Keyboard

D1 ↑ Increase	D2 Man	D3 Auto	D4 E1	D5 E2
D6 ↓ Decrease	D7 Acknowledge	D8 Object Display	D9 Object Trend	D10

Figure 4-39. Dynamic keys

D1: Increase	Perform: Increase output value with 0.5 if MAN = 1 Increase setpoint value with 0.5 %	MANOUT SETP
D2: Man	Perform: Set to manual mode	MORD_03 = 1 / ORDMAN = 1
D3: Auto	Perform: Set to automatic mode	MORD_04 = 1 / ORDAUTO = 1
D4: E1	Perform: Set to external1 mode	MORD_05 = 1 / ORDE1 = 1
D5: E2	Perform: Set to external2 mode	MORD_06 = 1 / ORDE2 = 1
D6: Decrease	Perform: Decrease output value with 0.5 if MAN = 1 Decrease setpoint value with 0.5 %	MANOUT SETP
D7: Acknowledge	Perform: Acknowledge	AL_UNACK = 0
D8: Object Display	Select: Object Display	
D9: Object Trend	Select: Object Trend	

4.9.2 MAX Dialog (Authority key)

4.9.2.1 Keyboard keys

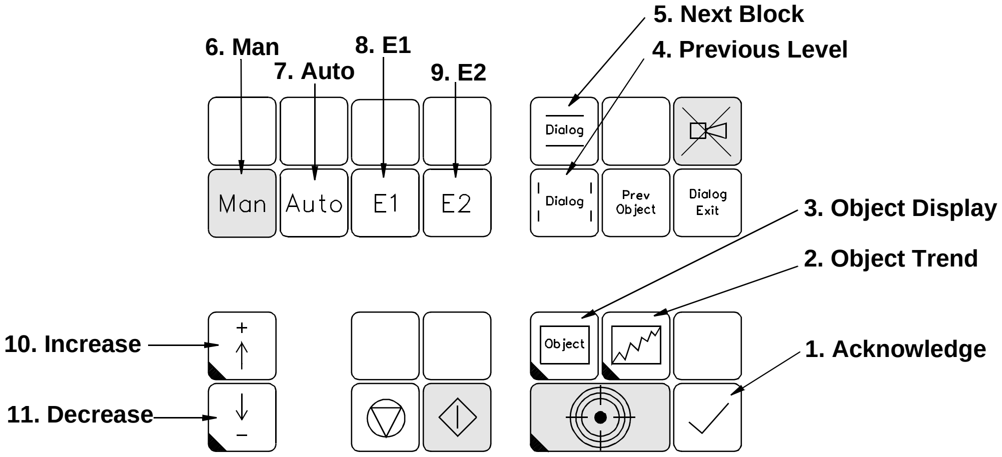


Figure 4-40. Keyboard keys

Key 1: Acknowledge	Perform: Acknowledge	AL_UNACK = 0
Key 2: Object Trend	Select: Object Trend	
Key 3: Object Display	Select: Object Display	
Key 4: Previous Level	Select Dynamic keys: Top Level	
Key 5: Next Block	Page between the dynamic key sets: Block, Limits and Keyboard	
Key 6: Man	Perform: Set to manual mode	MORD_03 = 1 / ORDMAN = 1
Key 7: Auto	Perform: Set to automatic mode	MORD_04 = 1 / ORDAUTO = 1
Key 8: E1	Perform: Set to external1 mode	MORD_05 = 1 / ORDE1 = 1
Key 9: E2	Perform: Set to external2 mode	MORD_06 = 1 / ORDE2 = 1
Key 10: Increase	Perform: Increase output value with 0.5 if MAN = 1 Increase setpoint value with 0.5 %	MANOUT SETP
Key 10: Shift + Increase	Perform: Increase output value with 5.0 if MAN = 1 Increase setpoint value with 5.0 %	MANOUT SETP
Key 11: Decrease	Perform: Decrease output value with 0.5 if MAN = 1 Decrease setpoint value with 0.5 %	MANOUT SETP
Key 11: Shift + Decrease	Perform: Decrease output value with 5.0 if MAN = 1 Decrease setpoint value with 5.0%	MANOUT SETP

4.9.2.2 Dynamic keys, Top Level

D1 Man Forced	D2	D3	D4	D5
D6 OUT	D7 SP	D8 Block...	D9 Limits...	D10 Keyboard...

Figure 4-41. Dynamic keys

D1: Man Forced	Perform: Set to manual forced mode Pressed: green text Released: white text	MORD_02 = 1 / ORDMANF = 1
D6: OUT	Pressed: Dialog for changing Output value, value magenta	MANOUT
D7: SP	Pressed: Dialog for changing Setpoint value, value cyan	SETP
D8: Block...	Select Dynamic keys: Block	
D9: Limits...	Select Dynamic keys: Limits	
D10:Keyboard...	Select Dynamic keys: Keyboard	

4.9.2.3 Dynamic keys, Keyboard

D1 ↑ Increase	D2 Man	D3 Auto	D4 E1	D5 E2
D6 ↓ Decrease	D7 Acknowledge	D8 Object Display	D9 Object Trend	D10

Figure 4-42. Dynamic keys

D1: Increase	Perform: Increase output value with 0.5 if MAN = 1 Increase setpoint value with 0.5 %	MANOUT SETP
D2: Man	Perform: Set to manual mode	MORD_03 = 1 / ORDMAN = 1
D3: Auto	Perform: Set to automatic mode	MORD_04 = 1 / ORDAUTO = 1
D4: E1	Perform: Set to external1 mode	MORD_05 = 1 / ORDE1 = 1
D5: E2	Perform: Set to external2 mode	MORD_06 = 1 / ORDE2 = 1
D6: Decrease	Perform: Decrease output value with 0.5 if MAN = 1 Decrease setpoint value with 0.5 %	MANOUT SETP
D7: Acknowledge	Perform: Acknowledge	AL_UNACK = 0
D8: Object Display	Select: Object Display	
D9: Object Trend	Select: Object Trend	

4.9.2.4 Dynamic keys, Block

D1 Block Alarm	D2	D3	D4	D5
D6 Deblock Alarm	D7	D8	D9	D10

Figure 4-43. Dynamic keys

D1: Block Alarm	Pressed: yellow text Released: white text	AL_BLK = 1
D6: Deblock Alarm	Pressed: green text Released: white text	AL_BLK = 0

4.9.2.5 Dynamic keys, Limits

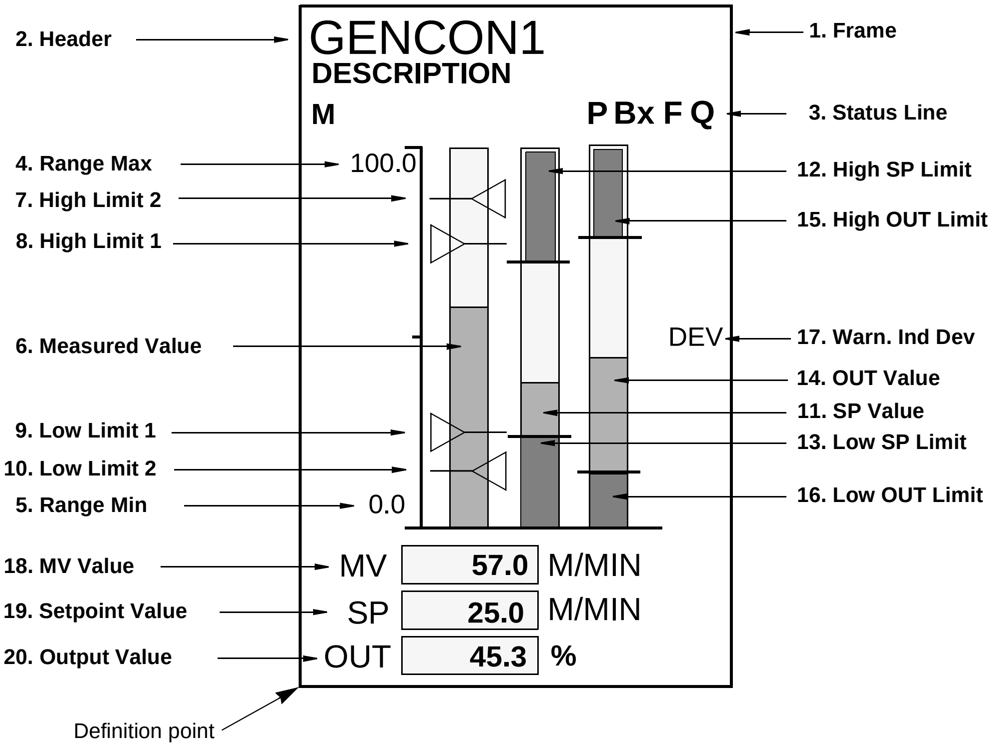
D1 H1 80.00	D2 H2 90.00	D3 SP H 50.00	D4	D5 OUT H 100.00
D6 L1 20.00	D7 L2 10.00	D8 SP L 10.00	D9	D10 OUT L 0.00

Figure 4-44. Dynamic keys

D1: H1	Pressed: Dialog for changing High Limit 1, value green	MVH1
D2: H2	Pressed: Dialog for changing High Limit 2, value green	MVH2
D3: SP H	Pressed: Dialog for changing Setpoint High, value cyan	SETPH
D5: OUT H	Pressed: Dialog for changing Output High, value magenta	OUTPH
D6: L1	Pressed: Dialog for changing Low Limit 1, value green	MVL1
D7: L2	Pressed: Dialog for changing Low Limit 2, value green	MVL2
D8: SP L	Pressed: Dialog for changing Setpoint Low, value cyan	SETPL
D10: OUT L	Pressed: Dialog for changing Output Low, value magenta	OUTPL

4.9.3 GCOGR01

Presentation:



Behavior:

No	Description	Presentation	Condition	Remarks
1	**SelectFrame**	White	SELECTED = 1	*Object select frame*
		Black	-	
2	**Header**		NAME and DESCR	*Object name and description*
		Red flashing	AU_ST_00 = 1 or AU_ST_03 = 1 or AU_ST_04 = 1 or AU_ST_05 = 1 or AU_ST_06 = 1 or AU_ST_07 = 1	*Unacknowledged signal error* *UnAck alarm Deviation* *UnAck alarm high limit 2* *UnAck alarm high limit 1* *UnAck alarm low limit 1* *UnAck alarm low limit 2*
		Red	ALAI = 1 or ALDEV = 1 or ALLIMH2 = 1 or ALLIMH1 = 1 or ALLIML1 = 1 or ALLIML2 = 1	*Signal error* *Alarm Deviation* *Alarm high limit 2* *Alarm high limit 1* *Alarm low limit 1* *Alarm low limit 2*
		Green	-	*Normal*

No	Description	Presentation	Condition	Remarks
3	**Status Line**			*Status Line*
3.1	**Mode**	**Bal** Green	BAL = 1	*Balanced mode*
		M Fd Green	MANF = 1	*Manual Forced mode* ManModeColor
		M Green	MAN = 1	*Manual mode* ManModeColor
		A Green	AUTO = 1	*Auto mode*
		E1 Green	E1 = 1	*E1 mode*
		E2 Green	E2 = 1	*E2 mode*
3.2	**Printout Blocked**	**P** Yellow	PR_BLK = 1	*Printout blocked*
3.3	**Alarm Blocked**	**B** Yellow	AL_BLK = 1	*Alarm blocked by operator*
		Bx Yellow	AUTO_BLK = 1	*Alarm blocked by PC-program*
		Be Yellow	EV_BLK = 1	*Event blocked*
3.4	**Alarm Indication**	**F** Red	ALDEV = 1 or	*Alarm Deviation*
			ALLIMH2 = 1 or	*Alarm high limit 2*
			ALLIMH1 = 1 or	*Alarm high limit 1*
			ALLIML1 = 1 or	*Alarm low limit 1*
			ALLIML2 = 1	*Alarm low limit 2*
3.5	**Signal Error Indication**	**Q** *Red*	ALAI = 1	*Signal error*
4	**Range Max**		MAX	*Range Max of the MV value*
		Green	-	
5	**Range Min**		MIN	*Range Min of the MV value*
		Green	-	
6	**Measured Value Bargraph**		MV	*Object measured value*
		Green	-	
7	**High Limit 2**		MVH2	*Alarm High limit 2*
	—◁	-	MVH2 >= MAX	*Invisible*
		Filled Yellow	ALLIMH2 = 1 and AL_BLK = 1	
		Unfilled Yellow	AL_BLK = 1	
		Filled Red flashing	ALLIMH2 = 1 and AU_ST_04 = 1	
		Unfilled Red flashing	AU_ST_04 = 1	
		Filled Red	ALLIMH2 = 1	
		Unfilled Grey	-	

No	Description	Presentation	Condition	Remarks
8	**High Limit 1**		MVH1	*Warning High limit 1*
	▷—	-	MVH1 >= MAX	*Invisible*
		Filled Yellow	ALLIMH1 = 1 and AL_BLK = 1	
		Unfilled Yellow	AL_BLK = 1	
		Filled Red flashing	ALLIMH1 = 1 and AU_ST_05 = 1	
		Unfilled Red flashing	AU_ST_05 = 1	
		Filled Red	ALLIMH1 = 1	
		Unfilled Grey	-	
9	**Low Limit 1**		MVL1	*Warning Low limit 1*
	▷—	-	MVL1 <= MIN	*Invisible*
		Filled Yellow	ALLIML1 = 1 and AL_BLK = 1	
		Unfilled Yellow	AL_BLK = 1	
		Filled Red flashing	ALLIML1 = 1 and AU_ST_06 = 1	
		Unfilled Red flashing	AU_ST_06 = 1	
		Filled Red	ALLIML1 = 1	
		Unfilled Grey	-	
10	**Low Limit 2**		MVL2	*Alarm Low limit 2*
	—◁	-	MVL2 <= MIN	*Invisible*
		Filled Yellow	ALLIML2 = 1 and AL_BLK = 1	
		Unfilled Yellow	AL_BLK = 1	
		Filled Red flashing	ALLIML2 = 1 and AU_ST_07 = 1	
		Unfilled Red flashing	AU_ST_07 = 1	
		Filled Red	ALLIML2 = 1	
		Unfilled Grey	-	
11	**SP Value**		SP	*Object setpoint value*
		Cyan	-	
12	**High SP Limit**		SETPH	*Upper warning limit setpoint*
		-	SETPH > MAX	*Invisible*
		Yellow	LIMSPH = 1	*Limitation line and mesh*
		Grey	-	
13	**Low SP Limit**		SETPL	*Lower warning limit setpoint*
		-	SETPL < MIN	*Invisible*
		Yellow	LIMSPL = 1	*Limitation line and mesh*
		Grey	-	

No	Description	Presentation	Condition	Remarks
14	**OUT Value**		OUT	*Object output value*
		-	INDON = 1 or ONOFCTRL = 1	*Invisible*
		Magenta	-	
15	**High OUT Limit**		OUTPH	*Upper warning limit output*
		-	INDON = 1 or ONOFCTRL = 1	*Invisible*
		-	OUTPH > 100 %	*Invisible*
		Yellow	LIMOPH = 1	*Limitation line and mesh*
		Grey	-	
16	**Low OUT Limit**		OUTPL	*Lower warning limit output*
		-	INDON = 1 or ONOFCTRL = 1	*Invisible*
		-	OUTPL < 0 %	*Invisible*
		Yellow	LIMOPL = 1	*Limitation line and mesh*
		Grey	-	
17	**Warning Indication Deviation**			*Warning indication Deviation*
		DEV Red	ALDEV = 1	
		-	ALDEV = 0	*Invisible*
18	**Measured Value**			*The MV object value*
18.1	**MV**	**MV** Grey		*Text in front of the value*
18.2	**MV Value**	**? ? ?** Red	ALAI = 1	*Signal error*
		Green	MV	*Measured value*
18.3	**MV Unit**		UNIT	*Measured unit*
		Green	-	
19	**Setpoint Value**			*The SP object value*
19.1	**SP**	**SP** Grey		*SP-text in front of the value*
19.2	**SP Value**		SP	*Setpoint value*
		Cyan		
19.3	**SP Unit**		UNIT	*Setpoint unit*
		Cyan	-	

No	Description	Presentation	Condition	Remarks
20	**Output Value**			*The OUT object value*
20.1	**OUT**	**OUT** Grey		*OUT-text in front of the value*
20.2	**OUT Value**		OUT	*Output value*
		Magenta	INDON = 0 and ONOFCTRL = 0	
20.3	**OUT Unit**	**%** Magenta	INDON = 0 and ONOFCTRL = 0	*Output unit*
20.4	**Status Indication**			*Status - Square indication*
		Filled Green	INDON = 1	*On*
		Unfilled Green	INDON = 0 and ONOFCTRL = 1	*Off*

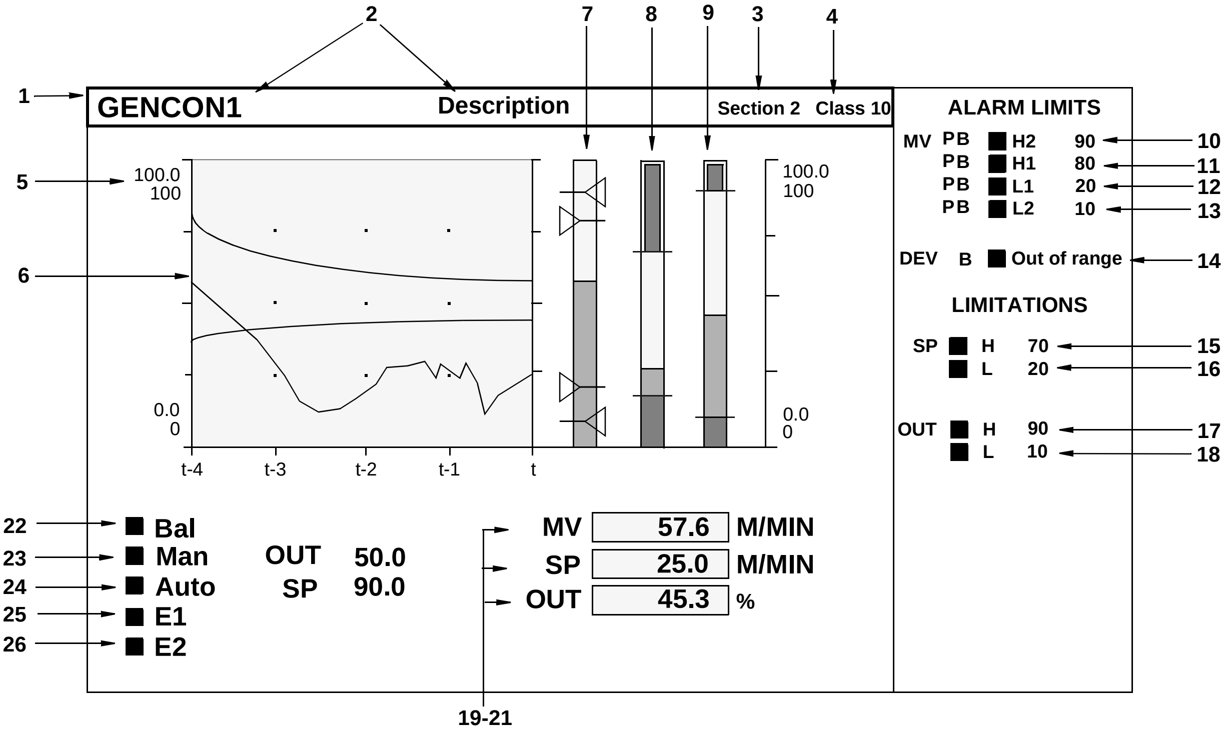
The conditions are in priority order. Underlined parameters are configurable.

Configuration:

Parameters	Affects	Options (bold is default)	Remarks
NameFont	2. Header Name	**FC50**, any font	
ManModeColor	3.1 Mode	**K5** (Green), any color	

4.9.4 GCOOB01

Presentation:



Behavior:

No	Description	Presentation	Condition	Remarks
1	**SelectFrame**	White	SELECTED = 1	*Object select frame*
		Black	-	
2	**Header**		NAME and DESCR	*Object name and description*
		Red flashing	AU_ST_00 = 1 or AU_ST_03 = 1 or AU_ST_04 = 1 or AU_ST_05 = 1 or AU_ST_06 = 1 or AU_ST_07 = 1	*Unacknowledged signal error* *UnAck alarm Deviation* *UnAck alarm high limit 2* *UnAck alarm high limit 1* *UnAck alarm low limit 1* *UnAck alarm low limit 2*
		Red	ALAI = 1 or ALDEV = 1 or ALLIMH2 = 1 or ALLIMH1 = 1 or ALLIML1 = 1 or ALLIML2 = 1	*Signal error* *Alarm Deviation* *Alarm high limit 2* *Alarm high limit 1* *Alarm low limit 1* *Alarm low limit 2*
		Green	-	*Normal*
3.1	**Section Text**	**Section** Grey		*Text in front of the value*
3.2	**Section Value**	Green	PROC_SEC	*Process section*
4.1	**Class Text**	**Class** Grey		*Text in front of the value*
4.2	**Class Value**	Green	CLASS	*Object class*

No	Description	Presentation	Condition	Remarks
5.1	**Range MV Max**		MAX	*Range Max of the MV value*
		Green	-	
5.2	**Range OUT Max**	**100** Magenta		*Range Max of the OUT value*
5.3	**Range MV Min**		MIN	*Range Min of the MV value*
		Green	-	
5.4	**Range OUT Min**	**0** Magenta		*Range Min of the OUT value*
6	**Measure Value Trim Curve**		MV	*Object measure value*
		Green	-	
	Setpoint Value Trim Curve		SP	*Object setpoint value*
		Cyan	-	
	Output Value Trim Curve		OUT	*Object output value*
		Magenta	-	
7.1	**Measured Value Bargraph**		MV	*Object value - Bargraph*
		Green	-	
7.2	**High Limit 2**		MVH2	*Alarm High limit 2*
	—◁	-	MVH2 >= MAX	*Invisible*
		Filled Yellow	ALLIMH2 = 1 and AL_BLK = 1	
		Unfilled Yellow	AL_BLK = 1	
		Filled Red flashing	ALLIMH2 = 1 and AU_ST_04 = 1	
		Unfilled Red flashing	AU_ST_04 = 1	
		Filled Red	ALLIMH2 = 1	
		Unfilled Grey	-	
7.3	**High Limit 1**		MVH1	*Warning High limit 1*
	▷—	-	MVH1 >= MAX	*Invisible*
		Filled Yellow	ALLIMH1 = 1 and AL_BLK = 1	
		Unfilled Yellow	AL_BLK = 1	
		Filled Red flashing	ALLIMH1 = 1 and AU_ST_05 = 1	
		Unfilled Red flashing	AU_ST_05 = 1	
		Filled Red	ALLIMH1 = 1	
		Unfilled Grey	-	

No	Description	Presentation	Condition	Remarks
7.4	**Low Limit 1**		MVL1	*Warning Low limit 1*
	▷—	-	MVL1 <= MIN	*Invisible*
		Filled Yellow	ALLIML1 = 1 and AL_BLK = 1	
		Unfilled Yellow	AL_BLK = 1	
		Filled Red flashing	ALLIML1 = 1 and AU_ST_06 = 1	
		Unfilled Red flashing	AU_ST_06 = 1	
		Filled Red	ALLIML1 = 1	
		Unfilled Grey	-	
7.5	**Low Limit 2**		MVL2	*Alarm Low limit 2*
	—◁	-	MVL2 <= MIN	*Invisible*
		Filled Yellow	ALLIML2 = 1 and AL_BLK = 1	
		Unfilled Yellow	AL_BLK = 1	
		Filled Red flashing	ALLIML2 = 1 and AU_ST_07 = 1	
		Unfilled Red flashing	AU_ST_07 = 1	
		Filled Red	ALLIML2 = 1	
		Unfilled Grey	-	
8.1	**SP Value**		SP	*Object setpoint value*
		Cyan	-	
8.2	**High SP Limit**		SETPH	*Upper warning limit setpoint*
		-	SETPH > MAX	*Invisible*
		Yellow	LIMSPH = 1	*Limitation line and mesh*
		Grey	-	
8.3	**Low SP Limit**		SETPL	*Lower warning limit setpoint*
		-	SETPL < MIN	*Invisible*
		Yellow	LIMSPL = 1	*Limitation line and mesh*
		Grey	-	
9.1	**OUT Value**		OUT	*Object output value*
		-	INDON = 1 or ONOFCTRL = 1	*Invisible*
		Magenta	-	
9.2	**High OUT Limit**		OUTPH	*Upper warning limit output*
		-	INDON = 1 or ONOFCTRL = 1	*Invisible*
		-	OUTPH > 100 %	*Invisible*
		Yellow	LIMOPH = 1	*Limitation line and mesh*
		Grey	-	

No	Description	Presentation	Condition	Remarks
9.3	**Low OUT Limit**		OUTPL	*Lower warning limit output*
		-	INDON = 1 or ONOFCTRL = 1	*Invisible*
		-	OUTPL < 0 %	*Invisible*
		Yellow	LIMOPL = 1	*Limitation line and mesh*
		Grey	-	
10	**ALARM LIMITS for MV**			*Alarm limits for MV*
10.1	**MV Text**	**MV** Grey		*Text in front of the line*
10.2	**Printout Blocked**	**P** Yellow	PR_BLK = 1	*Printout blocked*
10.3	**Alarm Blocked**	**B** Yellow	AL_BLK = 1	*Alarm blocked by operator*
		Bx Yellow	AUTO_BLK = 1	*Alarm blocked by PC-program*
		Be Yellow	EV_BLK = 1	*Event blocked*
10.4	**Alarm Indication**	■ Red flashing	ALLIMH2 = 1 and AU_ST_04 = 1	*Alarm High limit 2*
		■ Red	ALLIMH2 = 1	
10.5	**H2 Text**	**H2** Grey		*Text in front of the value*
10.6	**H2 Value**		MVH2	*High limit 2 value*
		Green	-	
11.1	**Printout Blocked**	**P** Yellow	PR_BLK = 1	*Printout blocked*
11.2	**Alarm Blocked**	**B** Yellow	AL_BLK = 1	*Alarm blocked by operator*
		Bx Yellow	AUTO_BLK = 1	*Alarm blocked by PC-program*
		Be Yellow	EV_BLK = 1	*Event blocked*
11.3	**Warning Indication**	■ Red flashing	ALLIMH1 = 1 and AU_ST_05 = 1	*Warning High limit 1*
		■ Red	ALLIMH1 = 1	
11.4	**H1 Text**	**H1** Grey		*Text in front of the value*
11.5	**H1 Value**		MVH1	*High limit 1 value*
		Green	-	
12.1	**Printout Blocked**	**P** Yellow	PR_BLK = 1	*Printout blocked*
12.2	**Alarm Blocked**	**B** Yellow	AL_BLK = 1	*Alarm blocked by operator*
		Bx Yellow	AUTO_BLK = 1	*Alarm blocked by PC-program*
		Be Yellow	EV_BLK = 1	*Event blocked*
12.3	**Warning Indication**	■ Red flashing	ALLIML1 = 1 and AU_ST_06 = 1	*Warning Low limit 1*
		■ Red	ALLIML1 = 1	
12.4	**L1 Text**	**L1** Grey		*Text in front of the value*
12.5	**L1 Value**		MVL1	*Low limit1 value*
		Green	-	

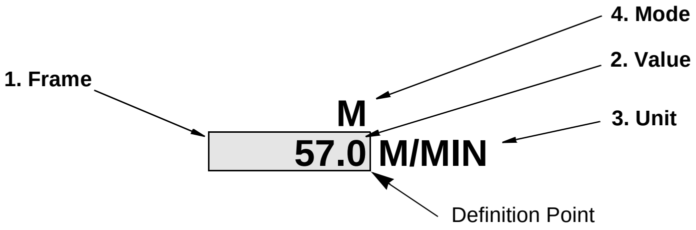
No	Description	Presentation	Condition	Remarks
13.1	**Printout Blocked**	**P** Yellow	PR_BLK = 1	*Printout blocked*
13.2	**Alarm Blocked**	**B** Yellow	AL_BLK = 1	*Alarm blocked by operator*
		Bx Yellow	AUTO_BLK = 1	*Alarm blocked by PC-program*
		Be Yellow	EV_BLK = 1	*Event blocked*
13.3	**Alarm Indication**	■ Red flashing	ALLIML2 = 1 and AU_ST_07 = 1	*Alarm Low limit 2*
		■ Red	ALLIML2 = 1	
13.4	**L2 Text**	**L2** Grey		*Text in front of the value*
13.5	**L2 Value**		MVL2	*Low limit 2 value*
		Green	-	
14.1	**DEV Text**	**DEV** Grey		*Text in front of the line*
14.2	**Alarm Blocked**	**B** Yellow	AL_BLK = 1	*Alarm blocked by operator*
		Bx Yellow	AUTO_BLK = 1	*Alarm blocked by PC-program*
		Be Yellow	EV_BLK = 1	*Event blocked*
14.3	**Alarm Indication**	■ Red flashing	ALDEV = 1 and AU_ST_03 = 1	
		■ Red	ALDEV = 1	
14.4	**Out of range Text**	**Out of range** Grey		
15	**LIMITATIONS for SP**			*Limitations for SP*
15.1	**SP Text**	**SP** Grey		*Text in front of the line*
15.2	**Warning Indication**	■ Yellow	LIMSPH = 1	*Warning Setpoint High*
15.3	**H Text**	**H** Grey		*Text in front of the value*
15.4	**H Value**		SETPH	*Setpoint High value*
		Cyan	-	
16.1	**Warning Indication**	■ Yellow	LIMSPL = 1	*Warning Setpoint Low*
16.2	**L Text**	**L** Grey		*Text in front of the value*
16.3	**L Value**		SETPL	*Setpoint Low value*
		Cyan	-	

No	Description	Presentation	Condition	Remarks
17	**LIMITATIONS for OUT**			*Limitations for OUT*
17.1	**OUT Text**	**OUT** Grey		*Text in front of the line*
17.2	**Warning Indication**	■ Yellow	LIMOPH = 1	*Warning Output High*
17.3	**H Text**	**H** Grey		*Text in front of the value*
17.4	**H Value**		OUTPH	*Output High value*
		Magenta	-	
18.1	**Warning Indication**	■ Yellow	LIMOPL = 1	*Warning Output Low*
18.2	**L Text**	**L** Grey		*Text in front of the value*
18.3	**L Value**		OUTPL	*Output Low value*
		Magenta	-	
19	**Measured Value**			*The MV object value*
19.1	**MV**	**MV** Grey		*Text in front of the value*
19.2	**MV Value**	**? ? ?** Red	ALAI = 1	*Signal error*
		Green	MV	*Measured value*
19.3	**MV Unit**		UNIT	*Measured unit*
		Green	-	
20	**Setpoint Value**			*The SP object value*
20.1	**SP**	**SP** Grey		*Text in front of the value*
20.2	**SP Value**		SP	*Setpoint value*
		Cyan	-	
20.3	**SP Unit**		UNIT	*Setpoint unit*
		Cyan	-	
21	**Output Value**			*The OUT object value*
21.1	**OUT**	**OUT** Grey		*Text in front of the value*
21.2	**OUT Value**		OUT	*Output value*
		Magenta	INDON = 0 and ONOFCTRL = 0	
21.3	**OUT Unit**	**%** Magenta	INDON = 0 and ONOFCTRL = 0	*Output unit*
21.4	**Status Indication**			*Status - Square indication*
		Filled Green	INDON = 1	*On*
		Unfilled Green	INDON = 0 and ONOFCTRL = 1	*Off*

No	Description	Presentation	Condition	Remarks
22.1	**Balance indication**	■ Green filled	BAL = 1	*Balance mode*
22.2	**Balance Text**	**Bal**		*Text behind the indication*
		Green	BAL = 1	*Balance mode*
		Grey	-	
23.1	**Man indication**	■ Green filled	MANF = 1 or MAN = 1	*Manual mode*
23.2	**Man Text**	**Man**		*Text behind the indication*
		Green	MANF = 1 or MAN = 1	*Manual mode*
		Grey	-	
23.3	**Forced Text**	**Forced** Green	MANF = 1	*Manual Forced mode*
		invisible	MANF = 0	
23.4	**Man Out Text**	**OUT** Grey		*Text in front of the value*
23.5	**Man Out Value**		MANOUT	*Man Out value*
		Magenta	MANF = 1 or MAN = 1	*Manual mode*
		Grey	-	
24.1	**Auto indication**	■ Green filled	AUTO = 1	*Auto mode*
24.2	**Auto Text**	**Auto**		*Text behind the indication*
		Green	AUTO = 1	*Auto mode*
		Grey	-	
24.3	**Auto Setpoint Text**	**SP** Grey		*Text in front of the value*
24.4	**Auto Setpoint Value**		SETP	*Auto Setpoint value*
		Cyan	AUTO = 1	*Auto mode*
		Grey	-	
25.1	**E1 indication**	■ Green filled	E1 = 1	*E1 mode*
25.2	**E1 Text**	**E1**		*Text behind the indication*
		Green	E1 = 1	*E1 mode*
		Grey	-	
26.1	**E2 indication**	■ Green filled	E2 = 1	*E2 mode*
26.2	**E2 Text**	**E2**		*Text behind the indication*
		Green	E2 = 1	*E2 mode*
		Grey	-	

4.9.5 GCOPD01

Presentation:



Behavior:

No	Description	Presentation	Condition	Remarks
1	**SelectFrame**	White	SELECTED = 1	*Selected*
		Dotted Yellow	AL_BLK = 1	*Alarm blocked by operator*
		Black	-	FrameColor
2	**Measured Value**		MV	*Object value*
		? ? ? Red flashing	ALAI = 1 and AU_ST_00 = 1	*Unacknowledged signal error*
		Red flashing	AU_ST_03 = 1 or AU_ST_04 = 1 or AU_ST_05 = 1 or AU_ST_06 = 1 or AU_ST_07 = 1	*UnAck alarm Deviation* *UnAck alarm high limit 2* *UnAck alarm high limit 1* *UnAck alarm low limit 1* *UnAck alarm low limit 2*
		? ? ? Red	ALAI = 1	*Signal error*
		Red	ALDEV = 1 or ALLIMH2 = 1 or ALLIMH1 = 1 or ALLIML1 = 1 or ALLIML2 = 1	*Alarm Deviation* *Alarm high limit 2* *Alarm high limit 1* *Alarm low limit 1* *Alarm low limit 2*
		Green	-	NormalColor
3	**Unit**		UnitVisible = onRequest	*Object unit*
		Green	UNIT	NormalColor
		-	UnitVisible = noSubscription	*Unit is invisible*

No	Description	Presentation	Condition	Remarks
4	**Mode**		ModeVisible = true	*Object mode*
		Bal Green	BAL = 1	*Balanced mode* ModeColor
		M Fd Green	MANF = 1	*Manual Forced mode* ManModeColor
		M Green	MAN = 1	*Manual mode* ManModeColor
		A Green	AUTO = 1	*Auto mode* AutoModeColor
		E1 Green	E1 = 1	*E1 mode* E1ModeColor
		E2 Green	E2 = 1	*E2 mode* ModeColor
		-	ModeVisible = false	*Mode is invisible*

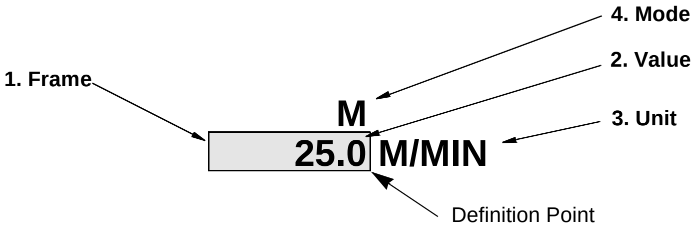
The conditions are in priority order. Underlined parameters are configurable.

Configuration:

Parameters	Affects	Options (bold is default)	Remarks
ModeVisible	4. Mode	**true**, false	
UnitVisible	3. Unit	**onRequest**, noSubscription	
NormalColor	2. Measured Value and 3. Unit	**K5** (Green), any color	
ModeColor	4. Mode	**K5** (Green), any color	
ManModeColor	4. Mode	**K5** (Green), any color	
AutoModeColor	4. Mode	**K5** (Green), any color	
E1ModeColor	4. Mode	**K5** (Green), any color	
SelectAreaColor	1. SelectArea	**K16** (Black), any color	*Background color and deletion color*
Font	2. Measured Value and 3. Unit	**FA40**, any font	
FrameColor	1. SelectFrame	**K16** (Black), any color	
FrameWidth	1. SelectFrame	**2**, (1..4)	
NumberOfChar	2. Measured Value	**7**	*Include "." and "-"*
UseDisplayColor	4. Mode	**false**, true	*true if DisplayColor used*
DisplayColor	4. Mode	**N13** (Black), any color	*Bg color for Mode if UseDisplay-Color is true*

4.9.6 GCOPD02

Presentation:



Behavior:

No	Description	Presentation	Condition	Remarks
1	**SelectFrame**	White	SELECTED = 1	*Selected*
		Dotted Yellow	AL_BLK = 1	*Alarm blocked by operator*
		Black	-	FrameColor
2	**Setpoint Value**		SP	*Object value*
		Red flashing	AU_ST_00 = 1 or AU_ST_03 = 1 or AU_ST_04 = 1 or AU_ST_05 = 1 or AU_ST_06 = 1 or AU_ST_07 = 1	*Unacknowledged signal error* *UnAck alarm Deviation* *UnAck alarm high limit 2* *UnAck alarm high limit 1* *UnAck alarm low limit 1* *UnAck alarm low limit 2*
		Red	ALAI = 1 or ALDEV = 1 or ALLIMH2 = 1 or ALLIMH1 = 1 or ALLIML1 = 1 or ALLIML2 = 1	*Signal error* *Alarm Deviation* *Alarm high limit 2* *Alarm high limit 1* *Alarm low limit 1* *Alarm low limit 2*
		Cyan	-	NormalColor
3	**Unit**		UnitVisible = onRequest	*Object unit*
		Cyan	UNIT	NormalColor
		-	UnitVisible = noSubscription	*Unit is invisible*

No	Description	Presentation	Condition	Remarks
4	**Mode**		ModeVisible = true	*Object mode*
		Bal Green	BAL = 1	*Balanced mode* ModeColor
		M Fd Green	MANF = 1	*Manual Forced mode* ManModeColor
		M Green	MAN = 1	*Manual mode* ManModeColor
		A Green	AUTO = 1	*Auto mode* AutoModeColor
		E1 Green	E1 = 1	*E1 mode* E1ModeColor
		E2 Green	E2 = 1	*E2 mode* ModeColor
		-	ModeVisible = false	*Mode is invisible*

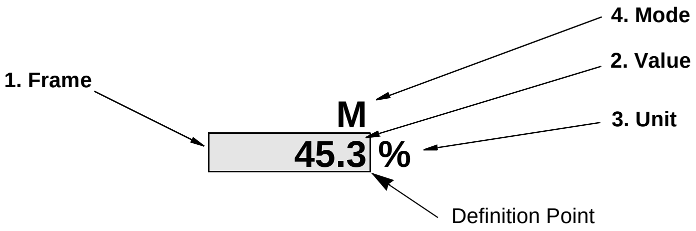
The conditions are in priority order. Underlined parameters are configurable.

Configuration:

Parameters	Affects	Options (bold is default)	Remarks
ModeVisible	4. Mode	**true**, false	
UnitVisible	3. Unit	**onRequest**, noSubscription	
NormalColor	2. Setpoint Value and 3. Unit	**K9** (Cyan), any color	
ModeColor	4. Mode	**K5** (Green), any color	
ManModeColor	4. Mode	**K5** (Green), any color	
AutoModeColor	4. Mode	**K5** (Green), any color	
E1ModeColor	4. Mode	**K5** (Green), any color	
SelectAreaColor	1. SelectArea	**K16** (Black), any color	*Background color and deletion color*
Font	2. Setpoint Value and 3. Unit	**FA40**, any font	
FrameColor	1. SelectFrame	**K16** (Black), any color	
FrameWidth	1. SelectFrame	**2**, (1..4)	
NumberOfChar	2. Sepoint Value	**7**	*Include "." and "-"*
UseDisplayColor	4. Mode	**false**, true	*true if DisplayColor used*
DisplayColor	4. Mode	**N13** (Black), any color	*Bg color for Mode if UseDisplay-Color is true*

4.9.7 GCOPD03

Presentation:



Behavior:

No	Description	Presentation	Condition	Remarks
1	**SelectFrame**	White	SELECTED = 1	*Selected*
		Dotted Yellow	AL_BLK = 1	*Alarm blocked by operator*
		Black	-	FrameColor
2	**Output Value**		OP	*Object value*
		Red flashing	AU_ST_00 = 1 or AU_ST_03 = 1 or AU_ST_04 = 1 or AU_ST_05 = 1 or AU_ST_06 = 1 or AU_ST_07 = 1	*Unacknowledged signal error* *UnAck alarm Deviation* *UnAck alarm high limit 2* *UnAck alarm high limit 1* *UnAck alarm low limit 1* *UnAck alarm low limit 2*
		Red	ALAI = 1 or ALDEV = 1 or ALLIMH2 = 1 or ALLIMH1 = 1 or ALLIML1 = 1 or ALLIML2 = 1	*Signal error* *Alarm Deviation* *Alarm high limit 2* *Alarm high limit 1* *Alarm low limit 1* *Alarm low limit 2*
		Magenta	-	NormalColor
3	**Unit**		UnitVisible = onRequest	*Object unit*
		% Magenta	Unit	NormalColor
		-	UnitVisible = noSubscription	*Unit is invisible*

No	Description	Presentation	Condition	Remarks
4	**Mode**		ModeVisible = true	*Object mode*
		Bal Green	BAL = 1	*Balanced mode* ModeColor
		M Fd Green	MANF = 1	*Manual Forced mode* ManModeColor
		M Green	MAN = 1	*Manual mode* ManModeColor
		A Green	AUTO = 1	*Auto mode* AutoModeColor
		E1 Green	E1 = 1	*E1 mode* E1ModeColor
		E2 Green	E2 = 1	*E2 mode* ModeColor
		-	ModeVisible = false	*Mode is invisible*

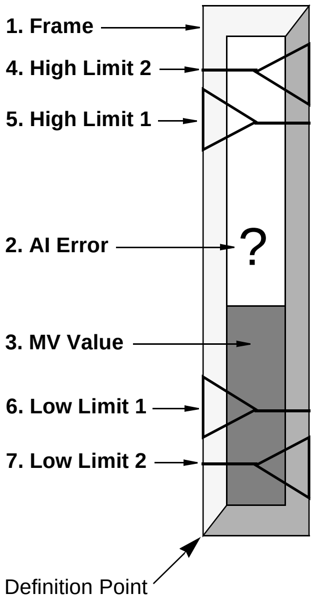
The conditions are in priority order. Underlined parameters are configurable.

Configuration:

Parameters	Affects	Options (bold is default)	Remarks
ModeVisible	4. Mode	**false**, true	
NormalColor	2. Output Value and 3. Unit	**K11** (Magenta), any color	
Unit	3. Unit	**%**	
ModeColor	4. Mode	**K5** (Green), any color	
ManModeColor	4. Mode	**K5** (Green), any color	
AutoModeColor	4. Mode	**K5** (Green), any color	
E1ModeColor	4. Mode	**K5** (Green), any color	
SelectAreaColor	1. SelectArea	**K16** (Black), any color	*Background color and deletion color*
Font	2. Output Value and 3. Unit	**FA40**, any font	
FrameColor	1. SelectFrame	**K16** (Black), any color	
FrameWidth	1. SelectFrame	**2**, (1..4)	
NumberOfChar	2. Output Value	**7**	*Include "." and "-"*
UseDisplayColor	4. Mode	**false**, true	*true if DisplayColor is used*
DisplayColor	4. Mode	**N13** (Black), any color	*Bg for Mode if UseDisplayColor is true*

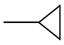
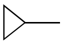
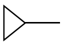
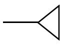
4.9.8 GCOPD51

Presentation:



Behavior:

No	Description	Presentation	Condition	Remarks
1.1	**SelectFrame**	White	SELECTED = 1	*Object frame*
		Black	-	FrameColor
1.2	**TopLeftEdge**			*Three Dimensions effect*
		Grey		TopLeftColor
1.3	**BottomRightEdge**			*Three Dimensions effect*
		Grey		BottomRightColor
2	**AI Error**	**?** Red flashing	ALAI = 1 and AU_ST_00 = 1	*Unacknowledged signal error*
		? Red	ALAI = 1	*Signal error*
3	**Measured Value**		MV	*Object value*
		-	ALAI = 1	*Invisible - I/O Error*
		Red flashing	AU_ST_03 = 1 or	*UnAck alarm Deviation*
			AU_ST_04 = 1 or	*UnAck alarm high limit 2*
			AU_ST_05 = 1 or	*UnAck alarm high limit 1*
			AU_ST_06 = 1 or	*UnAck alarm low limit 1*
			AU_ST_07 = 1	*UnAck alarm low limit 2*
		Red	ALDEV = 1 or	*Alarm Deviation*
			ALLIMH2 = 1 or	*Alarm high limit 2*
			ALLIMH1 = 1 or	*Alarm high limit 1*
			ALLIML1 = 1 or	*Alarm low limit 1*
			ALLIML2 = 1	*Alarm low limit 2*
		Green		NormalColor

No	Description	Presentation	Condition	Remarks
4	**High Limit 2**		MVH2	*Alarm High limit 2*
		-	MVH2 >= MAX	*Invisible*
		Filled Yellow	ALLIMH2 = 1 and AL_BLK = 1	
		Unfilled Yellow	AL_BLK = 1	
		Filled Red flashing	ALLIMH2 = 1 and AU_ST_04 = 1	
		Unfilled Red flashing	AU_ST_04 = 1	
		Filled Red	ALLIMH2 = 1	
		Unfilled Grey	-	LimitColor
5	**High Limit 1**		MVH1	*Warning High limit 1*
		-	MVH1 >= MAX	*Invisible*
		Filled Yellow	ALLIMH1 = 1 and AL_BLK = 1	
		Unfilled Yellow	AL_BLK = 1	
		Filled Red flashing	ALLIMH1 = 1 and AU_ST_05 = 1	
		Unfilled Red flashing	AU_ST_05 = 1	
		Filled Red	ALLIMH1 = 1	
		Unfilled Grey	-	LimitColor
6	**Low Limit 1**		MVL1	*Warning Low limit 1*
		-	MVL1 <= MIN	*Invisible*
		Filled Yellow	ALLIML1 = 1 and AL_BLK = 1	
		Unfilled Yellow	AL_BLK = 1	
		Filled Red flashing	ALLIML1 = 1 and AU_ST_06 = 1	
		Unfilled Red flashing	AU_ST_06 = 1	
		Filled Red	ALLIML1 = 1	
		Unfilled Grey	-	LimitColor
7	**Low Limit 2**		MVL2	*Alarm Low limit 2*
		-	MVL2 <= MIN	*Invisible*
		Filled Yellow	ALLIML2 = 1 and AL_BLK = 1	
		Unfilled Yellow	AL_BLK = 1	
		Filled Red flashing	ALLIML2 = 1 and AU_ST_07 = 1	
		Unfilled Red flashing	AU_ST_07 = 1	
		Filled Red	ALLIML2 = 1	
		Unfilled Grey	-	LimitColor

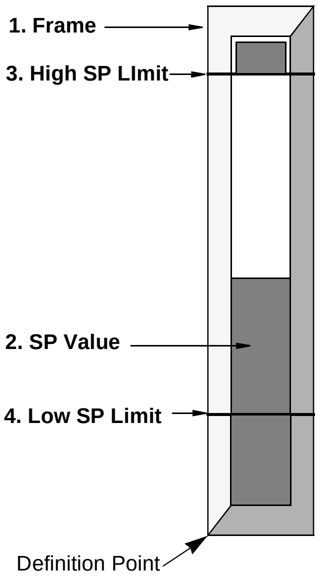
The conditions are in priority order. Underlined parameters are configurable.

Configuration:

Parameters	**Affects**	**Options (bold is default)**	**Remarks**
NormalColor	3. Measured Value	**K5** (Green), any color	
TopLeftColor	1.2 TopLeftEdge	**N13** (Grey), any color	*Regarding the choice of the color it will be three dimension effect*
BottomRightColor	1.3 BottomRightEdge	**N13** (Grey), any color	
FrameColor	1.1 SelectFrame	**K16** (Black), any color	
FrameWidth	1.1 SelectFrame	**2**, (1..4)	
BarBackColor	3. Measured Value	**K16** (Black), any color	*Background color of the bargraph*
LimitColor	4. High Limit 2, 5. High Limit 1, 6. Low Limit 1 and 7. Low Limit 2	**M16** (Grey), any color	*Color of the limit arrows*

4.9.9 GCOPD52

Presentation:



Behavior:

No	Description	Presentation	Condition	Remarks
1.1	**SelectFrame**	White	SELECTED = 1	*Object frame*
		Black	-	FrameColor
1.2	**TopLeftEdge**			*Three Dimensions effect*
		Grey		TopLeftColor
1.3	**BottomRightEdge**			*Three Dimensions effect*
		Grey		BottomRightColor
2	**Setpoint Value**		SP	*Object setpoint value*
		Red flashing	AU_ST_00 = 1 or AU_ST_03 = 1 or AU_ST_04 = 1 or AU_ST_05 = 1 or AU_ST_06 = 1 or AU_ST_07 = 1	*Unacknowledged signal error* *UnAck alarm Deviation* *UnAck alarm high limit 2* *UnAck alarm high limit 1* *UnAck alarm low limit 1* *UnAck alarm low limit 2*
		Red	ALAI = 1 or ALDEV = 1 or ALLIMH2 = 1 or ALLIMH1 = 1 or ALLIML1 = 1 or ALLIML2 = 1	*Signal error* *Alarm Deviation* *Alarm high limit 2* *Alarm high limit 1* *Alarm low limit 1* *Alarm low limit 2*
		Cyan		NormalColor

No	Description	Presentation	Condition	Remarks
3	**High SP Limit**		SETPH	*Upper warning limit setpoint*
		-	SETPH > MAX	*Invisible*
		Yellow	LIMSPH = 1	*Limitation line and mesh*
		Grey	-	LimitationColor
4	**Low SP Limit**		SETPL	*Lower warning limit setpoint*
		-	SETPL < MIN	*Invisible*
		Yellow	LIMSPL = 1	*Limitation line and mesh*
		Grey	-	LimitationColor

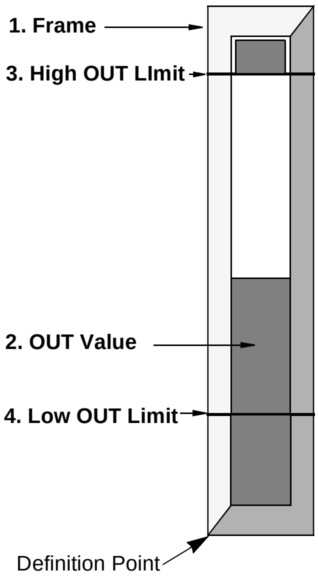
The conditions are in priority order. Underlined parameters are configurable.

Configuration:

Parameters	Affects	Options (bold is default)	Remarks
NormalColor	2. Setpoint Value	**K9** (Cyan), any color	
TopLeftColor	1.2 TopLeftEdge	**N13** (Grey), any color	*Regarding the choice of the color it will be three dimension effect*
BottomRightColor	1.3 BottomRightEdge	**N13** (Grey), any color	
FrameColor	1.1 SelectFrame	**K16** (Black), any color	
FrameWidth	1.1 SelectFrame	**2**, (1..4)	
BarBackColor	2. Setpoint Value	**K16** (Black), any color	*Background color of the bargraph*
LimitationColor	3. High SP Limit and 4. Low SP Limit	**M16** (Grey), any color	*Color of the limit arrows*

4.9.10 GCOPD53

Presentation:



Behavior:

No	Description	Presentation	Condition	Remarks
1.1	**SelectFrame**	White	SELECTED = 1	*Object frame*
		Black	-	FrameColor
1.2	**TopLeftEdge**			*Three Dimensions effect*
		Grey		TopLeftColor
1.3	**BottomRightEdge**			*Three Dimensions effect*
		Grey		BottomRightColor
2	**Output Value**		OUT	*Object output value*
		Red flashing	AU_ST_00 = 1 or AU_ST_03 = 1 or AU_ST_04 = 1 or AU_ST_05 = 1 or AU_ST_06 = 1 or AU_ST_07 = 1	*Unacknowledged signal error* *UnAck alarm Deviation* *UnAck alarm high limit 2* *UnAck alarm high limit 1* *UnAck alarm low limit 1* *UnAck alarm low limit 2*
		Red	ALAI = 1 or ALDEV = 1 or ALLIMH2 = 1 or ALLIMH1 = 1 or ALLIML1 = 1 or ALLIML2 = 1	*Signal error* *Alarm Deviation* *Alarm high limit 2* *Alarm high limit 1* *Alarm low limit 1* *Alarm low limit 2*
		Magenta		NormalColor

No	Description	Presentation	Condition	Remarks
3	**High OUT Limit**		OUTPH	*Upper warning limit output*
		-	OUTPH > 100 %	*Invisible if OUTPH >* RangeMax
		Yellow	LIMOPH = 1	*Limitation line and mesh*
		Grey	-	LimitationColor
4	**Low OUT Limit**		OUTPL	*Lower warning limit output*
		-	OUTPL < 0 %	*Invisible if OUTPL <* RangeMin
		Yellow	LIMOPL = 1	*Limitation line and mesh*
		Grey	-	LimitationColor

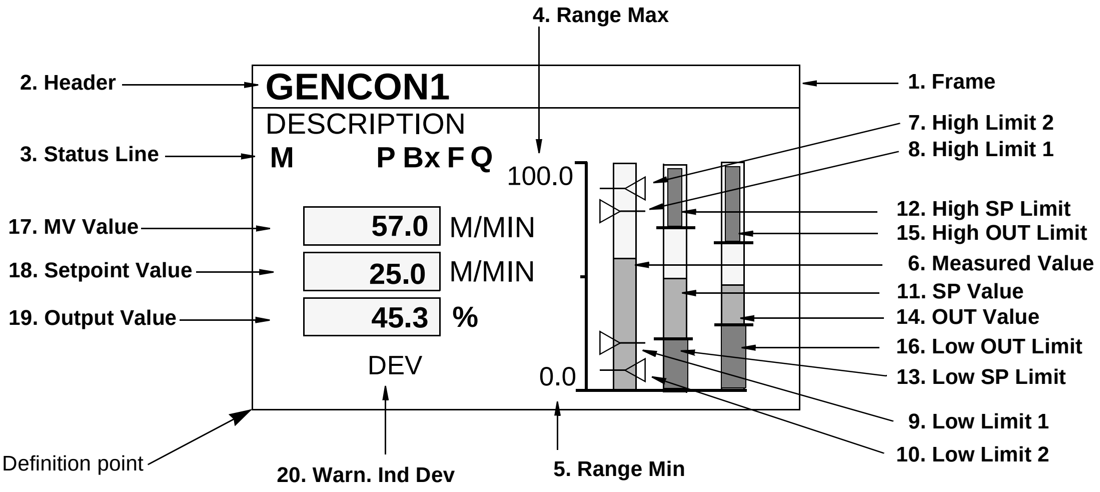
The conditions are in priority order. Underlined parameters are configurable.

Configuration:

Parameters	Affects	Options (bold is default)	Remarks
NormalColor	2. Output Value	**K11** (Magenta), any color	
TopLeftColor	1.2 TopLeftEdge	**N13** (Grey), any color	*Regarding the choice of the color it will be three dimension effect*
BottomRightColor	1.3 BottomRightEdge	**N13** (Grey), any color	
FrameColor	1.1 SelectFrame	**K16** (Black), any color	
FrameWidth	1.1 SelectFrame	**2**, (1..4)	
BarBackColor	2. Output Value	**K16** (Black), any color	*Background color of the bargraph*
LimitationColor	3. High OUT Limit and 4. Low OUT Limit	**M16** (Grey), any color	*Color of the limit arrows*
RangeMax	3. High OUT Limit	**100**	
RangeMin	4. Low OUT Limit	**0**	

4.9.11 GCOWI01

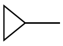
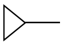
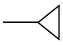
Presentation:



Behavior:

No	Description	Presentation	Condition	Remarks
1	**Select Frame**			*Object select frame*
		White	SELECTED = 1	*Only for overlap*
		Black	-	
2	**Header**		NAME and DESCR	*Object name and description*
		Red flashing	AU_ST_00 = 1 or AU_ST_03 = 1 or AU_ST_04 = 1 or AU_ST_05 = 1 or AU_ST_06 = 1 or AU_ST_07 = 1	*Unacknowledged signal error* *UnAck alarm Deviation* *UnAck alarm high limit 2* *UnAck alarm high limit 1* *UnAck alarm low limit 1* *UnAck alarm low limit 2*
		Red	ALAI = 1 or ALDEV = 1 or ALLIMH2 = 1 or ALLIMH1 = 1 or ALLIML1 = 1 or ALLIML2 = 1	*Signal error* *Alarm Deviation* *Alarm high limit 2* *Alarm high limit 1* *Alarm low limit 1* *Alarm low limit 2*
		Green	-	*Normal*

No	Description	Presentation	Condition	Remarks
3	**Status Line**			*Status Line*
3.1	**Mode**	**Bal** Green	BAL = 1	*Balanced mode*
		M Fd Green	MANF = 1	*Manual Forced mode*
		M Green	MAN = 1	*Manual mode*
		A Green	AUTO = 1	*Auto mode*
		E1 Green	E1 = 1	*E1 mode*
		E2 Green	E2 = 1	*E2 mode*
3.2	**Printout Blocked**	**P** Yellow	PR_BLK = 1	*Printout blocked*
3.3	**Alarm Blocked**	**B** Yellow	AL_BLK = 1	*Alarm blocked by operator*
		Bx Yellow	AUTO_BLK = 1	*Alarm blocked by PC-program*
		Be Yellow	EV_BLK = 1	*Event blocked*
3.4	**Alarm Indication**	**F** Red	ALDEV = 1 or	*Alarm Deviation*
			ALLIMH2 = 1 or	*Alarm high limit 2*
			ALLIMH1 = 1 or	*Alarm high limit 1*
			ALLIML1 = 1 or	*Alarm low limit 1*
			ALLIML2 = 1	*Alarm low limit 2*
3.5	**Signal Error Indication**	**Q** *Red*	ALAI = 1	*Signal error*
4	**Range Max**		MAX	*Range Max of the MV value*
		Green	-	
5	**Range Min**		MIN	*Range Min of the MV value*
		Green	-	
6	**Measured Value Bargraph**		MV	*Object measured value*
		Green	-	
7	**High Limit 2**		MVH2	*Alarm High limit 2*
	—◁	-	MVH2 >= MAX	*Invisible*
		Filled Yellow	ALLIMH2 = 1 and AL_BLK = 1	
		Unfilled Yellow	AL_BLK = 1	
		Filled Red flashing	ALLIMH2 = 1 and AU_ST_04 = 1	
		Unfilled Red flashing	AU_ST_04 = 1	
		Filled Red	ALLIMH2 = 1	
		Unfilled Grey	-	

No	Description	Presentation	Condition	Remarks
8	**High Limit 1**		MVH1	*Warning High limit 1*
		-	MVH1 >= MAX	*Invisible*
		Filled Yellow	ALLIMH1 = 1 and AL_BLK = 1	
		Unfilled Yellow	AL_BLK = 1	
		Filled Red flashing	ALLIMH1 = 1 and AU_ST_05 = 1	
		Unfilled Red flashing	AU_ST_05 = 1	
		Filled Red	ALLIMH1 = 1	
		Unfilled Grey	-	
9	**Low Limit 1**		MVL1	*Warning Low limit 1*
		-	MVL1 <= MIN	*Invisible*
		Filled Yellow	ALLIML1 = 1 and AL_BLK = 1	
		Unfilled Yellow	AL_BLK = 1	
		Filled Red flashing	ALLIML1 = 1 and AU_ST_06 = 1	
		Unfilled Red flashing	AU_ST_06 = 1	
		Filled Red	ALLIML1 = 1	
		Unfilled Grey	-	
10	**Low Limit 2**		MVL2	*Alarm Low limit 2*
		-	MVL2 <= MIN	*Invisible*
		Filled Yellow	ALLIML2 = 1 and AL_BLK = 1	
		Unfilled Yellow	AL_BLK = 1	
		Filled Red flashing	ALLIML2 = 1 and AU_ST_07 = 1	
		Unfilled Red flashing	AU_ST_07 = 1	
		Filled Red	ALLIML2 = 1	
		Unfilled Grey	-	
11	**SP Value**		SP	*Object setpoint value*
		Cyan	-	
12	**High SP Limit**		SETPH	*Upper warning limit setpoint*
		-	SETPH > MAX	*Invisible*
		Yellow	LIMSPH = 1	*Limitation line and mesh*
		Grey	-	
13	**Low SP Limit**		SETPL	*Lower warning limit setpoint*
		-	SETPL < MIN	*Invisible*
		Yellow	LIMSPL = 1	*Limitation line and mesh*
		Grey	-	

No	Description	Presentation	Condition	Remarks
14	**OUT Value**		OUT	*Object output value*
		-	INDON = 1 or ONOFCTRL = 1	*Invisible*
		Magenta	-	
15	**High OUT Limit**		OUTPH	*Upper warning limit output*
		-	INDON = 1 or ONOFCTRL = 1	*Invisible*
		-	OUTPH > 100 %	*Invisible*
		Yellow	LIMOPH = 1	*Limitation line and mesh*
		Grey	-	
16	**Low OUT Limit**		OUTPL	*Lower warning limit output*
		-	INDON = 1 or ONOFCTRL = 1	*Invisible*
		-	OUTPL < 0 %	*Invisible*
		Yellow	LIMOPL = 1	*Limitation line and mesh*
		Grey	-	
17	**Measured Value**			*The MV object value*
17.1	**MV Value**	**? ? ?** Red	ALAI = 1	*Signal error*
		Green	MV	*Measured value*
17.2	**MV Unit**		UNIT	*Measured unit*
		Green	-	
18	**Setpoint Value**			*The SP object value*
18.1	**SP Value**		SP	*Setpoint value*
		Cyan	-	
18.2	**SP Unit**		UNIT	*Setpoint unit*
		Cyan	-	
19	**Output Value**			*The OUT object value*
19.1	**OUT Value**		OUT	*Output value*
		Magenta	INDON = 0 and ONOFCTRL = 0	
19.2	**OUT Unit**	**%** Magenta	INDON = 0 and ONOFCTRL = 0	*Output unit*
19.3	**Status Indication**			*Status - Square indication*
		Filled Green	INDON = 1	*On*
		Unfilled Green	INDON = 0 and ONOFCTRL = 1	*Off*
20	**Warning Indication Deviation**			*Warning indication Deviation*
		DEV Red	ALDEV = 1	
		-	ALDEV = 0	*Invisible*

4.10 Process Dialog for Group Start GROUP

4.10.1 MIN Dialog (No authority key)

4.10.1.1 Keyboard keys

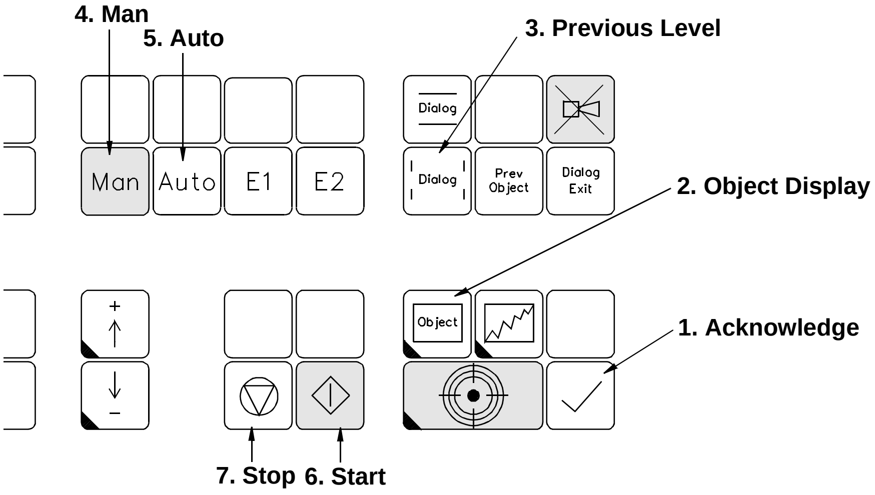


Figure 4-45. Keyboard keys

Key 1: Acknowledge	Perform: Acknowledge	AL_UNACK = 0
Key 2: Object Display	Select: Object Display	
Key 3: Previous Level	Select Dynamic keys: Top Level	
Key 4: Man	Perform: Set to manual mode	MORD_05 = 1
Key 5: Auto	Perform: Set to automatic mode	MORD_04 = 1
Key 6: Start	Perform: Start motor	MORD_10 = 1
Key 7: Stop	Perform: Stop motor	MORD_11 = 1

4.10.1.2 Dynamic keys, Top Level

D1 Sequence	D2 Central	D3 Local	D4	D5
D6 ⊟ Hold	D7 Instant Stop	D8	D9	D10 Keyboard...

Figure 4-46. Dynamic keys

D1: Sequence	Perform: Set control to Sequence Pressed: green text Released: white text	MORD_15 = 1
D2: Central	Perform: Set control to Central Pressed: green text Released: white text	MORD_03 = 1
D3: Local	Perform: Set control to Local Pressed: green text Released: white text	MORD_00 = 1
D6: Hold	Perform: Stop the stepping in the sequence.	MORD_09 = 1
D7: Instant Stop	Perform: Stop the stepping in the sequence.	MORD_12 = 1
D10:Keyboard...	Select Dynamic keys: Keyboard	

4.10.1.3 Dynamic keys, Keyboard

D1 ■ Start	D2 Man	D3 Auto	D4	D5
D6 □ Stop	D7 Acknowledge	D8 Object Display	D9	D10

Figure 4-47. Dynamic keys

D1: Start	Perform: Start motor	MORD_10 = 1
D2: Man	Perform: Set to manual mode	MORD_05 = 1
D3: Auto	Perform: Set to automatic mode	MORD_04 = 1
D6: Stop	Perform: Stop motor	MORD_11 = 1
D7: Acknowledge	Perform: Acknowledge	AL_UNACK = 0
D8: Object Display	Select: Object Display	

4.10.2 MAX Dialog (Authority key)

4.10.2.1 Keyboard keys

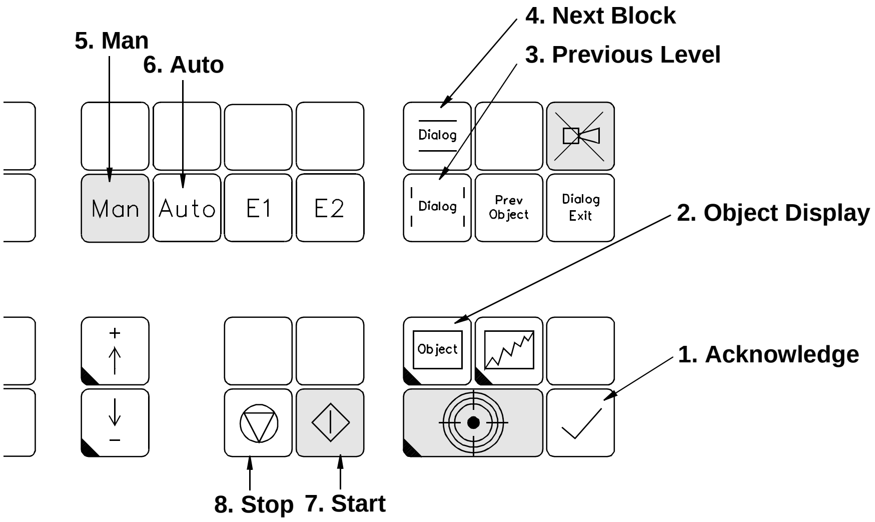


Figure 4-48. Keyboard keys

Key 1: Acknowledge	Perform: Acknowledge	AL_UNACK = 0
Key 2: Object Display	Select: Object Display	
Key 3: Previous Level	Select Dynamic keys: Top Level	
Key 4: Next Block	Page between the dynamic key sets: Block and Keyboard	
Key 5: Man	Perform: Set to manual mode	MORD_05 = 1
Key 6: Auto	Perform: Set to automatic mode	MORD_04 = 1
Key 7: Start	Perform: Start motor	MORD_10 = 1
Key 8: Stop	Perform: Stop motor	MORD_11 = 1

4.10.2.2 Dynamic keys, Top Level

D1 Sequence	D2 Central	D3 Local	D4 Test	D5 Out of Service
D6 ⊟ Hold	D7 Instant Stop	D8 Block...	D9	D10 Keyboard...

Figure 4-49. Dynamic keys

D1: Sequence	Perform: Set control to Sequence Pressed: green text Released: white text	MORD_15 = 1
D2: Central	Perform: Set control to Central Pressed: green text Released: white text	MORD_03 = 1
D3: Local	Perform: Set control to Local Pressed: green text Released: white text	MORD_00 = 1
D4: Test	Perform: Set control to Test Pressed: green text Released: white text	MORD_01= 1
D5: Out of Service	Perform: Set control to Out of Service Pressed: green text Released: white text	MORD_02 = 1
D6: Hold	Perform: Stop the stepping in the sequence.	MORD_09 = 1
D7: Instant Stop	Perform: Stop the stepping in the sequence.	MORD_12 = 1
D8: Block...	Select Dynamic keys: Block	
D10:Keyboard...	Select Dynamic keys: Keyboard	

4.10.2.3 Dynamic keys, Keyboard

D1 ■ Start	D2 Man	D3 Auto	D4	D5
D6 ☐ Stop	D7 Acknowledge	D8 Object Display	D9	D10

Figure 4-50. Dynamic keys

D1: Start	Perform: Start motor	MORD_10 = 1
D2: Man	Perform: Set to manual mode	MORD_05 = 1
D3: Auto	Perform: Set to automatic mode	MORD_04 = 1
D6: Stop	Perform: Stop motor	MORD_11 = 1
D7: Acknowledge	Perform: Acknowledge	AL_UNACK = 0
D8: Object Display	Select: Object Display	

4.10.2.4 Dynamic keys, Block

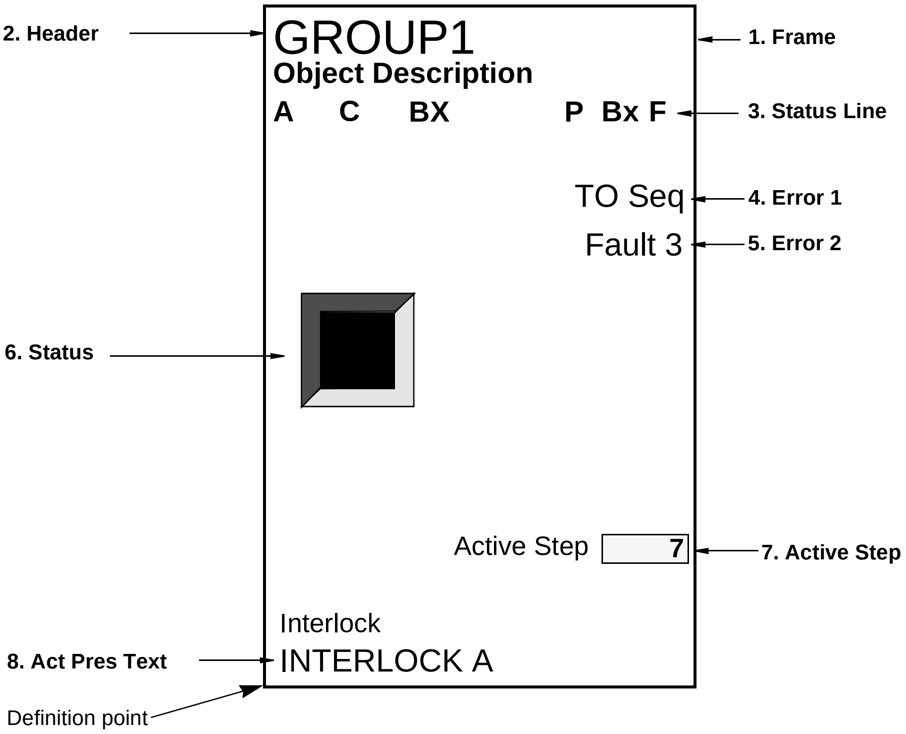
D1	D2 Block Alarm	D3 Block Printout	D4	D5 Override Interlock
D6	D7 Deblock Alarm	D8 Deblock Printout	D9	D10 Normal Interlock

Figure 4-51. Dynamic keys

D2: Block Alarm	Pressed: yellow text Released: white text	AL_BLK = 1
D3: Block Printout	Pressed: yellow text Released: white text	PR_BLK = 1
D5: Override Interlock	Pressed: yellow text Released: white text	MORD_06 = 1
D7: Deblock Alarm	Pressed: green text Released: white text	AL_BLK = 0
D8: Deblock Printout	Pressed: green text Released: white text	PR_BLK = 0
D10: Normal Interlock	Pressed: green text Released: white text	MORD_07 = 1

4.10.3 GRPGR01

Presentation:



Behavior:

No	Description	Presentation	Condition	Remarks
1	**SelectFrame**	White	SELECTED = 1	*Object select frame*
		Black	-	
2	**Header**		NAME and DESCR	*Object name and description*
		Red flashing	AU_IND = 1	*Unacknowledged alarm*
		Red	IND1_DIST = 1	*Alarm*
		Green	-	*Normal*
3	**Status Line**			
3.1	**Mode**	**M** Green	IND2_05 = 0 and IND2_02 = 0 and IND2_03 = 0	*Manual mode* ManModeColor
		A Green	IND2_05 = 1 and IND2_02 = 0 and IND2_03 = 0	*Auto mode*

No	Description	Presentation	Condition	Remarks
3.2	**Point Of Control**	**O** Yellow	IND2_03 = 1	*Out of Service*
		T Yellow	IND2_02 = 1	*Test*
		L Green	IND2_01 = 1	*Local*
		S Green	IND2_04 = 1	*Sequence*
		C Green	IND2_01 = 0 and IND2_02 = 0 and IND2_03 = 0 and IND2_04 = 0	*Central*
3.3	**Interlock Indication**	**X** Green	IND2_08 = 1 or IND2_09 = 1 or IND2_11 = 1 or (IND2_13 = 1 and IND1_12 = 0) or (IND2_00 = 0 and (IND2_12 = 1 or (IND2_10 = 1 and IND1_12 = 0)))	*Safety interlock or* *Operator interlock*
		BX Red	IND2_15 = 1	*Override Interlocks.* *Interlock IB1 or IB3 active*
		BX Yellow	IND2_00 = 1	*Override Interlock*
3.4	**Printout Blocked**	**P** Yellow	PR_BLK = 1	*Printout blocked*
3.5	**Alarm Blocked**	**B** Yellow	AL_BLK = 1	*Alarm blocked by operator*
		Bx Yellow	AL_P_BLK = 1	*Alarm blocked by PC-program*
3.6	**Fault Indication**	**F** Red	IND1_08 = 1	*Collective fault indication*
4	**Error 1**	**TO Seq** Red flashing	AU_IND1_00 = 1	*Time Out Seq. Unack alarm*
		TO Step Red flashing	AU_IND1_01 = 1	*Time Out Step Unack alarm*
		TO Seq Red	IND1_00 = 1	*Time Out Sequence alarm*
		TO Step Red	IND1_01 = 1	*Time Out Step alarm*
5	**Error 2**	**Fault 3** Red flashing	AU_IND1_02 = 1	*Unack alarm fault 3*
		Fault 4 Red flashing	AU_IND1_03 = 1	*Unack alarm fault 4*
		Fault 5 Red flashing	AU_IND1_04 = 1	*Unack alarm fault 5*
		Fault 3 Red	IND1_02 = 1	*Alarm fault 3*
		Fault 4 Red	IND1_03 = 1	*Alarm fault 4*
		Fault 5 Red	IND1_04 = 1	*Alarm fault 5*

No	Description	Presentation	Condition	Remarks
6	**Status Indication**	☒	IND2_06 = 0	*Not Ready for Start*
		⊟	IND1_15 = 1	*Hold*
		▣	IND1_12 = 1 or IND1_13 = 1	*Run or* *Sequence in progress*
		■	IND2_06 = 1	*Ready to start*
		⧄	IND2_14 = 1 and IND2_06 = 1	*A-Interlock*
		Grey	IND2_03 = 1	*Out of service*
		Green flashing	IND1_13 = 1	*Sequence in Progress*
		Green	-	
7.1	**Active Step Text**	**Active Step** Grey		*Active Step text*
7.2	**Active Step Value**	Green	INTL_RES	
8.1	**Interlock Text**	**Interlock** Grey		*Interlock text*
8.2	**Act Pres Text**		ACT_PRES_TEXT	*Actual interlock text*
		Yellow	IND2_06 = 0	*Not ready for start*
		Green	IND2_06 = 1	*Ready for start*

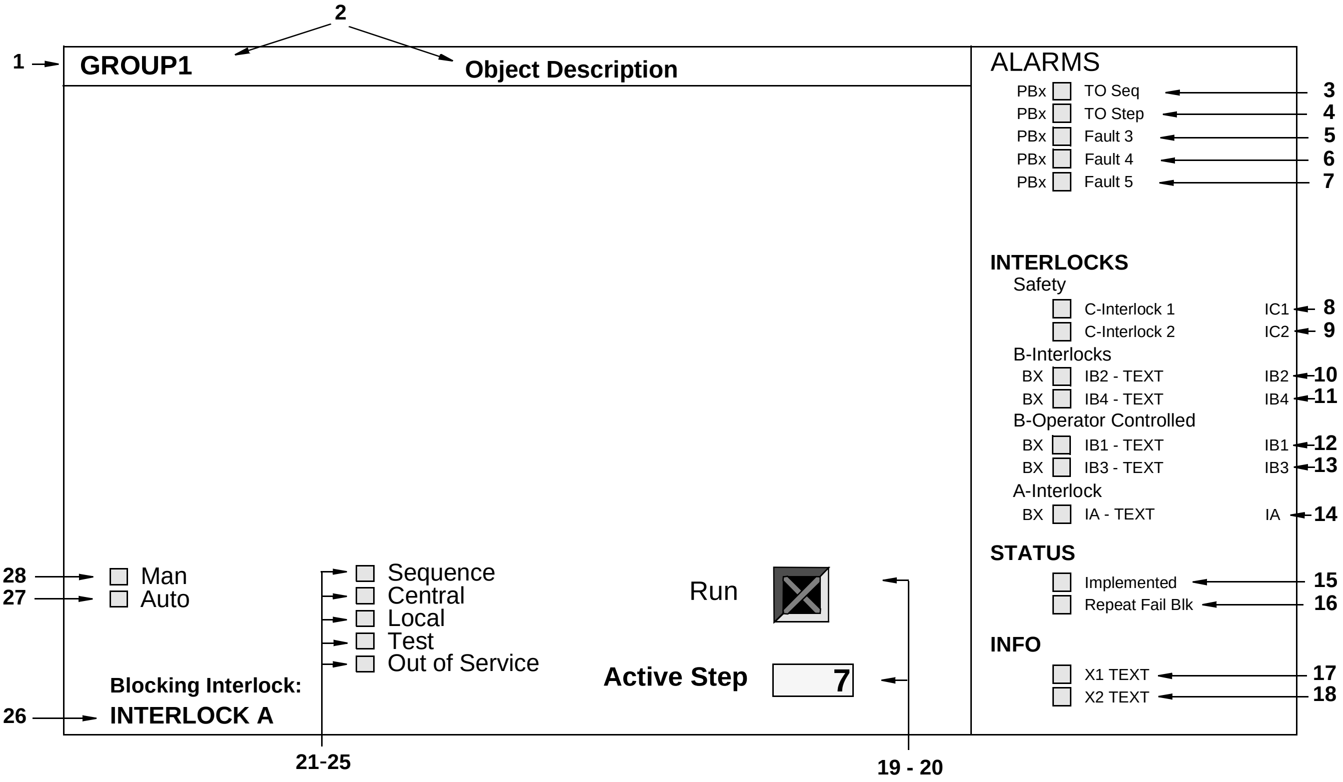
The conditions are in priority order. Underlined parameters are configurable.

Configuration:

Parameters	Affects	Options (bold is default)	Remarks
NameFont	2. Header Name	**FC50**, any font	
ManModeColor	3.1 Mode	**K5** (Green), any color	

4.10.4 GRPOB01

Presentation:



Behavior:

No	Description	Presentation	Condition	Remarks
1	**SelectFrame**	White	SELECTED = 1	*Object select frame*
		Black	-	
2	**Header**		NAME and DESCR	*Object name and description*
		Red flashing	AU_IND = 1	*Unacknowledged alarm*
		Red	IND1_DIST = 1	*Alarm*
		Green	-	*Normal*
3	**ALARMS**			*Alarms*
3.1	**Printout Blocked**	**P** Yellow	PR_BLK = 1	*Printout blocked*
3.2	**Alarm Blocked**	**B** Yellow	AL_BLK = 1	*Alarm blocked by operator*
		Bx Yellow	AL_P_BLK = 1	*Alarm blocked by PC-program*
3.3	**Warning Indication**	■ Red flashing	AU_IND1_00 = 1	*Unacknowledged alarm*
		■ Red	IND1_00 = 1	*Alarm*
3.4	**Alarm 1 Text**	**TO Seq**	TXT_BLK_00 = 0	*Time Out Sequence*
		Red	IND1_00 = 1 or AU_IND1_00 = 1	
		Grey	-	

No	Description	Presentation	Condition	Remarks
4.1	**Printout Blocked**	**P** Yellow	PR_BLK = 1	*Printout blocked*
4.2	**Alarm Blocked**	**B** Yellow	AL_BLK = 1	*Alarm blocked by operator*
		Bx Yellow	AL_P_BLK = 1	*Alarm blocked by PC-program*
4.3	**Warning Indication**	■ Red flashing	AU_IND1_01 = 1	*Unacknowledged alarm*
		■ Red	IND1_01 = 1	*Alarm*
4.4	**Alarm 2 Text**	**TO Step**	TXT_BLK_01 = 0	*Time Out Step*
		Red	IND1_01 = 1 or AU_IND1_01 = 1	
		Grey	-	
5.1	**Printout Blocked**	**P** Yellow	PR_BLK = 1	*Printout blocked*
5.2	**Alarm Blocked**	**B** Yellow	AL_BLK = 1	*Alarm blocked by operator*
		Bx Yellow	AL_P_BLK = 1	*Alarm blocked by PC-program*
5.3	**Warning Indication**	■ Red flashing	AU_IND1_02 = 1	*Unacknowledged alarm*
		■ Red	IND1_02 = 1	*Alarm*
5.4	**Alarm 3 Text**	**Fault 3**	TXT_BLK_02 = 0	*Error text for fault 3*
		Red	IND1_02 = 1 or AU_IND1_02 = 1	
		Grey	-	
6.1	**Printout Blocked**	**P** Yellow	PR_BLK = 1	*Printout blocked*
6.2	**Alarm Blocked**	**B** Yellow	AL_BLK = 1	*Alarm blocked by operator*
		Bx Yellow	AL_P_BLK = 1	*Alarm blocked by PC-program*
6.3	**Warning Indication**	■ Red flashing	AU_IND1_03 = 1	*Unacknowledged alarm*
		■ Red	IND1_03 = 1	*Alarm*
6.4	**Alarm 4 Text**	**Fault 4**	TXT_BLK_03 = 0	*Error text for fault 4*
		Red	IND1_03 = 1 or AU_IND1_03 = 1	
		Grey	-	
7.1	**Printout Blocked**	**P** Yellow	PR_BLK = 1	*Printout blocked*
7.2	**Alarm Blocked**	**B** Yellow	AL_BLK = 1	*Alarm blocked by operator*
		Bx Yellow	AL_P_BLK = 1	*Alarm blocked by PC-program*
7.3	**Warning Indication**	■ Red flashing	AU_IND1_04 = 1	*Unacknowledged alarm*
		■ Red	IND1_04 = 1	*Alarm*
7.4	**Alarm 5 Text**	**Fault 5**	TXT_BLK_04 = 0	*Error text for fault 5*
		Red	IND1_04 = 1 or AU_IND1_04 = 1	

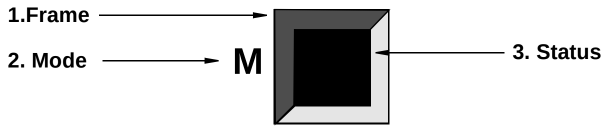
No	Description	Presentation	Condition	Remarks
		Grey	-	
8	**INTERLOCKS**			*Interlocks*
8.1	**IC1 Active**	■ Yellow	IND2_08 = 1	*Safety Interlock IC1 active*
8.2	**IC1 Text**	**C-Interlock 1** Grey		*Safety Interlock IC1*
9.1	**IC2 Active**	■ Yellow	IND2_09 = 1	*Safety Interlock IC2 active*
9.2	**IC2 Text**	**C-Interlock 2** Grey		*Safety Interlock IC2*
10.1	**IB2 Blocked**	**BX** Yellow	IND2_02 = 1	*Test mode. Interlock blocked*
10.2	**IB2 Active**	■ Yellow	IND2_11 = 1	*Interlock IB2 active*
10.3	**IB2 Text**	Green	IB2_TXT	*Interlock text IB2*
11.1	**IB4 Blocked**	**BX** Yellow	IND2_02 = 1	*Test mode. Interlock blocked*
11.2	**IB4 Active**	■ Yellow	IND2_13 = 1	*Interlock IB4 active*
11.3	**IB4 Text**	Green	IB4_TXT	*Interlock IB4 text*
12.1	**IB1 Blocked**	**BX** Red	IND2_15 = 1 and (IND2_00 = 1 or IND2_02 = 1)	*Override Interlock and Interlock IB1 active*
		BX Yellow	IND2_00 = 1 or IND2_02 = 1	*Test mode. Interlock blocked*
12.2	**IB1 Active**	■ Yellow	IND2_10 = 1	*Interlock IB1 active*
12.3	**IB1 Text**	Green	IB1_TXT	*Interlock IB1 text*
13.1	**IB3 Blocked**	**BX** Red	IND2_15 = 1 and (IND2_00 = 1 or IND2_02 = 1)	*Override Interlock and Interlock IB3 active*
		BX Yellow	IND2_00 = 1 or IND2_02 = 1	*Test mode. Interlock blocked*
13.2	**IB3 Active**	■ Yellow	IND2_12 = 1	*Interlock IB3 active*
13.3	**IB3 Text**	Green	IB3_TXT	*Interlock IB3*
14.1	**IA Blocked**	**BX** Yellow	IND2_02 = 1	*Test mode. Interlock blocked*
14.2	**IA Active**	■ Yellow	IND2_14 = 1	*Interlock IA active*
14.3	**IA Text**	Green	IA_TXT	*Interlock IA text*
15	**STATUS**			*Status*
15.1	**Implemented Indication**	■ Green	ACT = 1	
15.2	**Implemented Text**	**Implemented** Grey		*Implemented*
16.1	**Repeat Fail Blocked Indication**	■ Yellow	REPEAT_BLK = 1	*The motor can be controlled*
16.2	**Repeat Fail Blocked Text**	**Repeat Fail Blk**		*Repeat Fail Blocked*
		Yellow	REPEAT_BLK = 1	
		Grey	-	
17	**INFO**			*Info*
17.1	**X1 Indication**	■ Red flashing	AU_IND1_07 = 1	*Unack external alarm X1*
		■ Red	IND1_07 = 1	*External alarm*

No	Description	Presentation	Condition	Remarks
17.2	**X1 Text**	Green	X1_TXT	
18.1	**X2 Indication**	■ Red flashing	AU_IND1_11 = 1	*Unack external alarm X2*
		■ Red	IND1_11 = 1	*External alarm*
18.2	**X2Text**	Green	X2_TXT	
19.1	**Run**	**Run** Grey		*Run*
19.2	**Status**	☒	IND2_06 = 0	*Not Ready for Start*
		⊟	IND1_15 = 1	*Hold*
		▣	IND1_12 = 1 or IND1_13 = 1	*Run or* *Sequence in progress*
		■	IND2_06 = 1	*Ready to start*
		⧄	IND2_14 = 1 and IND2_06 = 1	*A-Interlock*
		Grey	IND2_03 = 1	*Out of service*
		Green flashing	IND1_13 = 1	*Sequence in Progress*
		Green	-	
20.1	**Active Step**	**Active Step** Grey		
20.2	**Active Step Value**	Green	INTL_RES	*Value of current step*
21.1	**Sequence Indication**	■ Green	IND2_04 = 1	*Sequence Controlled from groupstart*
21.2	**Sequence Text**	**Sequence**		
		Green	IND2_04 = 1	
		Grey	-	
22.1	**Central Indication**	■ Green	IND2_01 = 0 and IND2_02 = 0 and IND2_03 = 0 and IND2_04 = 0	*Central Controlled from operator's place*
22.2	**Central Text**	**Central**		
		Green	IND2_01 = 0 and IND2_02 = 0 and IND2_03 = 0 and IND2_04 = 0	
		Grey	-	
23.1	**Local Indication**	■ Green	IND2_01 = 1	*Local* *Controlled from local panel*
23.2	**Local Text**	**Local**		

No	Description	Presentation	Condition	Remarks
		Green	IND2_01 = 1	
		Grey	-	
24.1	**Test Indication**	■ Yellow	IND2_02 = 1	*Test* *Jog running from motor place*
24.2	**Test Text**	**Test**		
		Yellow	IND2_02 = 1	
		Grey	-	
25.1	**Out of Service Indication**	■ Yellow	IND2_03 = 1	*Out of service* *No control possible*
25.2	**Out of Service Text**	**Out of Service**		
		Yellow	IND2_03 = 1	
		Grey	-	
26.1	**Blocking Interlock Text**	**Blocking Interlock:** Grey		*Blocking Interlock text*
26.2	**Act Pres Text**		ACT_PRES_TEXT	*Actual interlock text*
		Red	IND2_06 = 0	*Not ready for start*
		Yellow	IND2_06 = 1	*Ready for start*
27.1	**Auto Indication**	■ Green	IND2_05 = 1 and IND2_02 = 0 and IND2_03 = 0	*Auto mode. Process conditions control start/stop of motor*
27.2	**Auto Text**	**Auto**		
		Green	IND2_05 = 1 and IND2_02 = 0 and IND2_03 = 0	
		Grey	-	
28.1	**Man Indication**	■ Green	IND2_05 = 0 and IND2_02 = 0 and IND2_03 = 0	*Manual mode. Startorder affects the motor directly*
28.2	**Man Text**	**Man** Grey		
		Green	IND2_05 = 0 and IND2_02 = 0 and IND2_03 = 0	
		Grey	-	

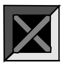
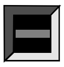
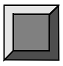
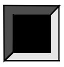
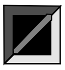
4.10.5 GRPPD01

Presentation:



Behavior:

No	Description	Presentation	Condition	Remarks
1	**SelectFrame**	White	SELECTED = 1	*Selected*
		Yellow	IND2_00 = 1	*Interlock override by operator*
		Dotted Yellow	AL_BLK = 1	*Alarm blocked by operator*
		Black		
2	**Mode or**		ModeVisible = true	
	Control point	***** Yellow	IND2_02 = 1 and IND2_03 = 0	*Test*
		A Green	IND2_05 = 1 and IND2_02 = 0 and IND2_03 = 0	*Auto mode* AutoModeColor
		M Green	ManModeVisible = true and IND2_05 = 0 and IND2_02 = 0 and IND2_03 = 0	*Manual mode* ManModeColor
			ManModeVisible = false	
		S Green	IND2_04 = 1	*Sequence Control* SequenceColor
		L Green	IND2_01 = 1 and IND2_04 = 0	*Local Control* LocalColor
		C Green	IND2_01 = 0 and IND2_04 = 0	*Central Control* CentralColor
		-	ModeVisible = false	*Mode is invisible*

No	Description	Presentation	Condition	Remarks
3	**Status** Shape		IND2_06 = 0	*Not Ready for Start*
			IND1_15 = 1	*Hold*
			IND1_12 = 1 or IND1_13 = 1	*Run or* *Sequence in progress*
			IND2_06 = 1	*Ready to start*
			IND2_14 = 1 and IND2_06 = 1 and IND2_02 = 0	*A-Interlock*
	color	Grey	IND2_03 = 1	*Out of Service*
		Red flashing	AU_IND = 1	*Alarm Unack*
		Red	IND1_DIST = 1	*Error*
		Green flashing	IND1_13 = 1	*Start/Stop in progress* SeqRunningColor
		Green	-	OnColor

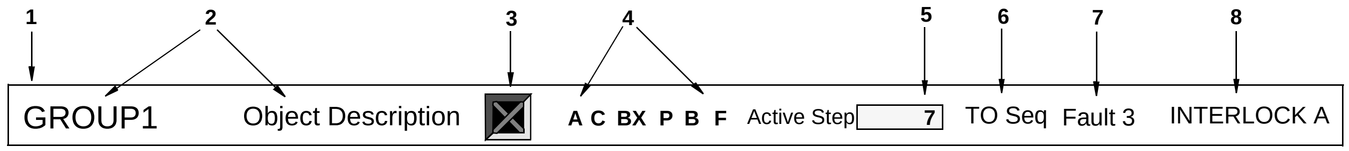
The conditions are in priority order. Underlined parameters are configurable.

Configuration:

Parameters	Affects	Options (bold is default)	Remarks
ModeIndVisible	2. Mode	**true**, false	
AutoModeColor	2. Mode	**K5** (Green), any color	
ManModeColor	2. Mode	**K5** (Green), any color	
ManModeVisible	2. Mode	**true**, false	*True = Man, False = S, L or C*
SequenceColor	2. Control point	**K5** (Green), any color	
LocalColor	2. Control point	**K5** (Green), any color	
CentralColor	2. Control point	**K5** (Green), any color	
FrameWidth	1. SelectFrame	**2**, (1..4)	
OffColor	3. Status	**K16** (Black), any color	
OnColor	3. Status	**K5** (Green), any color	
SeqRunningColor	3. Status	**N5** (Green flashing), any color	
Light3DColor	3 Three dim. indication	**L5** (Light Green), any color	
Dark3DColor	3 Three dim. indication	**M5** (Dark Green), any color	
Font	2. Mode	**FA40**, any font	
UseDisplayColor	2. Mode	**false**, true	*true if DisplayColor used*
DisplayColor	2. Mode	**N13** (Black), any color	*Bg for Mode if UseDisplayColor is true*

4.10.6 GRPSG01

Presentation:



Behavior:

No	Description	Presentation	Condition	Remarks
1	**SelectFrame**	White	SELECTED = 1	*Selected*
		Black	-	FrameColor
2	**Header**		NAME and DESCR	*Object name and description*
		Red flashing	AU_IND = 1	*Unacknowledged alarm*
		Red	IND1_DIST = 1	*Alarm*
		Green	-	*Normal*
3	**Status**	☒	IND2_06 = 0	*Not Ready for Start*
		⊟	IND1_15 = 1	*Hold*
		▢	IND1_12 = 1 or IND1_13 = 1	*Run or* *Sequence in progress*
		■	IND2_06 = 1	*Ready to start*
		⧄	IND2_14 = 1 and IND2_06 = 1 and IND2_02 = 0	*A-Interlock*
		Grey	IND2_03 = 1	*Out of service*
		Green flashing	IND1_13 = 1	*Sequence in Progress*
		Green	-	

No	Description	Presentation	Condition	Remarks
4.1	**Mode**	**M** Green	IND2_05 = 0 and IND2_02 = 0 and IND2_03 = 0	*Manual mode* ManModeColor
		A Green	IND2_05 = 1 and IND2_02 = 0 and IND2_03 = 0	*Auto start* AutoModeColor
4.2	**Point Of Control**	**O** Yellow	IND2_03 = 1	*Out of Service*
		T Yellow	IND2_02 = 1	*Test*
		L Green	IND2_01 = 1	*Local* LocalColor
		S Green	IND2_04 = 1	*Sequence* SequenceColor
		C Green	IND2_01 = 0 and IND2_02 = 0 and IND2_03 = 0 and IND2_04 = 0	*Central* CentralColor
4.3	**Interlock Indication**	**X** Green	IND2_08 = 1 or IND2_09 = 1 or IND2_11 = 1 or (IND2_13 = 1 and IND1_12 = 0) or (IND2_00 = 0 and (IND2_12 = 1 or (IND2_10 = 1 and IND1_12 = 0)))	*Safety interlock or* *Operator interlock*
		BX Red	IND2_15 = 1	*Override Interlocks. Interlock IB1 or IB3 active*
		BX Yellow	IND2_00 = 1	*Override Interlock*
4.4	**Printout Blocked**	**P** Yellow	PR_BLK = 1	*Printout blocked*
4.5	**Alarm Blocked**	**B** Yellow	AL_BLK = 1	*Alarm blocked by operator*
		Bx Yellow	AL_P_BLK = 1	*Alarm blocked by PC-program*
4.6	**Fault Indication**	**F** Red	IND1_08 = 1	*Collective fault indication*
5.1	**Active Step Text**	**Active Step** Grey		*Active Step text*
5.2	**Active Step value**	Green	INTL_RES	

No	Description	Presentation	Condition	Remarks
6	**Error 1**	**TO Seq** Red flashing	AU_IND1_00 = 1	*Time Out Seq. Unack alarm*
		TO Step Red flashing	AU_IND1_01 = 1	*Time Out Step Unack alarm*
		TO Seq Red	IND1_00 = 1	*Time Out Sequence alarm*
		TO Step Red	IND1_01 = 1	*Time Out Step alarm*
7	**Error 2**	**Fault 3** Red flashing	AU_IND1_02 = 1	*Unack alarm fault 3*
		Fault 4 Red flashing	AU_IND1_03 = 1	*Unack alarm fault 4*
		Fault 5 Red flashing	AU_IND1_04 = 1	*Unack alarm fault 5*
		Fault 3 Red	IND1_02 = 1	*Alarm fault 3*
		Fault 4 Red	IND1_03 = 1	*Alarm fault 4*
		Fault 5 Red	IND1_04 = 1	*Alarm fault 5*
8	**Act Pres Text**		ACT_PRES_TEXT	*Actual interlock text*
		Red	IND2_06 = 0	*Not ready for start*
		Yellow	IND2_06 = 1	*Ready for start*

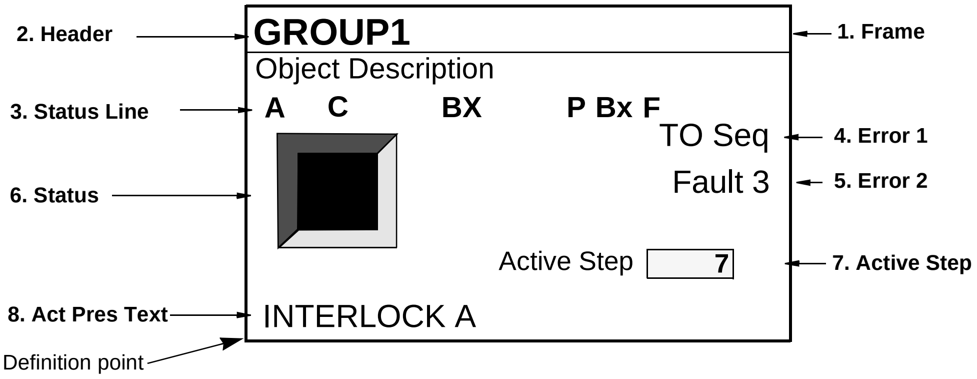
The conditions are in priority order. Underlined parameters are configurable.

Configuration:

Parameters	Affects	Options (bold is default)	Remarks
FrameColor	1. SelectFrame	**K16** (Black), any color	
NameFont	2. Header Name	**FC50**, any font	
ManModeColor	4.1 Mode	**K5** (Green), any color	
AutoModeColor	4.1 Mode	**K5** (Green), any color	
SequenceColor	4.2 Point Of Control	**K5** (Green), any color	
CentralColor	4.2 Point Of Control	**K5** (Green), any color	
LocalColor	4.2 Point Of Control	**K5** (Green), any color	

4.10.7 GRPWI01

Presentation:



Behavior:

No	Description	Presentation	Condition	Remarks
1	**Select Frame**			*Object select frame*
		White	SELECTED = 1	*Only for overlap*
		Black	-	
2	**Header**		NAME and DESCR	*Object name and description*
		Red flashing	AU_IND = 1	*Unacknowledged alarm*
		Red	IND1_DIST = 1	*Alarm*
		Green	-	*Normal*
3	**Status Line**			
3.1	**Mode**	**M** Green	IND2_05 = 0 and IND2_02 = 0 and IND2_03 = 0	*Manual mode*
		A Green	IND2_05 = 1 and IND2_02 = 0 and IND2_03 = 0	*Auto mode*
3.2	**Point Of Control**	**O** Yellow	IND2_03 = 1	*Out of Service*
		T Yellow	IND2_02 = 1	*Test*
		L Green	IND2_01 = 1	*Local*
		S Green	IND2_04 = 1	*Sequence*
		C Green	IND2_01 = 0 and IND2_02 = 0 and IND2_03 = 0 and IND2_04 = 0	*Central*

No	Description	Presentation	Condition	Remarks
3.3	**Interlock Indication**	**X** Green	IND2_08 = 1 or IND2_09 = 1 or IND2_11 = 1 or (IND2_13 = 1 and IND1_12 = 0) or (IND2_00 = 0 and (IND2_12 = 1 or (IND2_10 = 1 and IND1_12 = 0)))	*Safety interlock or* *Operator interlock*
		BX Red	IND2_15 = 1	*Override Interlocks.* *Interlock IB1 or IB3 active*
		BX Yellow	IND2_00 = 1	*Override Interlock*
3.4	**Printout Blocked**	**P** Yellow	PR_BLK = 1	*Printout blocked*
3.5	**Alarm Blocked**	**B** Yellow	AL_BLK = 1	*Alarm blocked by operator*
		Bx Yellow	AL_P_BLK = 1	*Alarm blocked by PC-program*
3.6	**Fault Indication**	**F** Red	IND1_08 = 1	*Collective fault indication*
4	**Error 1**	**TO Seq** Red flashing	AU_IND1_00 = 1	*Time Out Seq. Unack alarm*
		TO Step Red flashing	AU_IND1_01 = 1	*Time Out Step Unack alarm*
		TO Seq Red	IND1_00 = 1	*Time Out Sequence alarm*
		TO Step Red	IND1_01 = 1	*Time Out Step alarm*
5	**Error 2**	**Fault 3** Red flashing	AU_IND1_02 = 1	*Unack alarm fault 3*
		Fault 4 Red flashing	AU_IND1_03 = 1	*Unack alarm fault 4*
		Fault 5 Red flashing	AU_IND1_04 = 1	*Unack alarm fault 5*
		Fault 3 Red	IND1_02 = 1	*Alarm fault 3*
		Fault 4 Red	IND1_03 = 1	*Alarm fault 4*
		Fault 5 Red	IND1_04 = 1	*Alarm fault 5*

No	Description	Presentation	Condition	Remarks
6	**Status**	☒	IND2_06 = 0	*Not Ready for Start*
		⊟	IND1_15 = 1	*Hold*
		▣	IND1_12 = 1 or IND1_13 = 1	*Run or* *Sequence in progress*
		■	IND2_06 = 1	*Ready to start*
		⧄	IND2_14 = 1 and IND2_06 = 1	*A-Interlock*
		Grey	IND2_03 = 1	*Out of service*
		Green flashing	IND1_13 = 1	*Sequence in Progress*
		Green	-	
7.1	**Active Step Text**	**Active Step** Grey		*Active Step text*
7.2	**Active Step Value**	Green	INTL_RES	
8	**Act Pres Text**		ACT_PRES_TEXT	*Actual interlock text*
		Red	IND2_06 = 0	*Not ready for start*
		Yellow	IND2_06 = 1	*Ready for start*

4.11 Process Dialog for User Defined Object GENUSD(1-6)

4.11.1 MIN Dialog (No authority key)

4.11.1.1 Keyboard keys

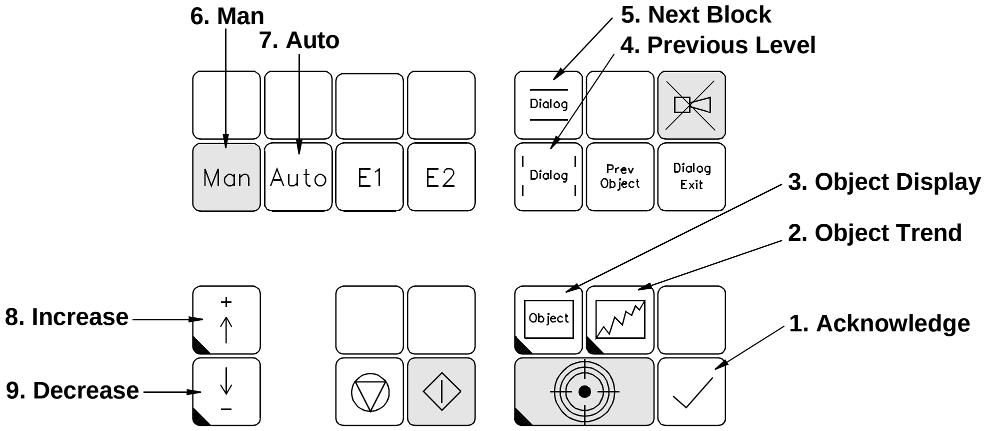


Figure 4-52. Keyboard keys

Key 1: Acknowledge	Perform: Acknowledge	AL_UNACK = 0
Key 2: Object Trend	Select: Object Trend	
Key 3: Object Display	Select: Object Display	
Key 4: Previous Level	Select Dynamic keys: Top Level	
Key 5: Next Block	Page between the dynamic key sets: Extend and Keyboard	
Key 6: Man	Perform: Set to manual mode	MORD_04 = 1 / ORDMAN = 1
Key 7: Auto	Perform: Set to automatic mode	MORD_05 = 1 / ORDAUTO = 1
Key 8: Increase	Perform: Increase setpoint value with 0.5 % Increase setpoint 2 value with 0.5 % or at least 1.0	SETP SETP2
Key 8: Shift + Increase	Perform: Increase setpoint value with 5 % Increase setpoint 2 value with 5 % or at least 1.0	SETP SETP2
Key 9: Decrease	Perform: Decrease setpoint value with 0.5 % Decrease setpoint 2 value with 0.5 % or at least -1.0	SETP SETP2
Key 9: Shift + Decrease	Perform: Decrease setpoint value with 5 % Decrease setpoint 2 value with 5 % or at least -1.0	SETP SETP2

4.11.1.2 Dynamic keys, Top Level

D1 C1	D2 C2	D3 C3	D4 C4	D5 Extend...
D6 SP	D7 SP2	D8	D9	D10 Keyboard...

Figure 4-53. Dynamic keys

D1: C1	Perform: Set to C1 mode	MORD_09 = 1 / ORDC1 = 1
D2: C2	Perform: Set to C2 mode	MORD_10 = 1 / ORDC2 = 1
D3: C3	Perform: Set to C3 mode	MORD_11 = 1 / ORDC3 = 1
D4: C4	Perform: Set to C4 mode	MORD_12 = 1 / ORDC4 = 1
D5: Extend...	Select Dynamic keys: Extend	
D6: SP	Pressed: Dialog for changing Setpoint value, value cyan	SETP
D7: SP2	Pressed: Dialog for changing Setpoint value, value cyan	SETP2
D10:Keyboard...	Select Dynamic keys: Keyboard	

4.11.1.3 Dynamic keys, Keyboard

D1 ↑ Increase	D2 Man	D3 Auto	D4	D5
D6 ↓ Decrease	D7 Acknowledge	D8 Object Display	D9 Object Trend	D10

Figure 4-54. Dynamic keys

D1: Increase	Perform: Increase setpoint value with 0.5 %	SETP
	Increase setpoint 2 value with 0.5 % or at least 1.0	SETP2
D2: Man	Perform: Set to manual mode	MORD_04 = 1 / ORDMAN = 1
D3: Auto	Perform: Set to automatic mode	MORD_05 = 1 / ORDAUTO = 1
D6: Decrease	Perform: Decrease setpoint value with 0.5 %	SETP
	Decrease setpoint 2 value with 0.5 % or at least -1.0	SETP2
D7: Acknowledge	Perform: Acknowledge	AL_UNACK = 0
D8: Object Display	Select: Object Display	
D9: Object Trend	Select: Object Trend	

4.11.1.4 Dynamic keys, Extend

D1 M1	D2 M2	D3 M3	D4 Standby	D5 Blocked
D6 C5	D7 C6	D8 C7	D9 C8	D10

Figure 4-55. Dynamic keys

D1: M1	Perform: Set to M1 mode	MORD_01 = 1 / ORDM1 = 1
D2: M2	Perform: Set to M2 mode	MORD_02 = 1 / ORDM2 = 1
D3: M3	Perform: Set to M3 mode	MORD_03 = 1 / ORDM3 = 1
D4: Standby	Perform: Set to Standby mode	MORD_07 = 1 / ORDSTBY = 1
D5: Blocked	Perform: Set to Blocked mode	MORD_06 = 1 / ORDBLK = 1
D6: C5	Perform: Set to C5 mode	MORD_13 = 1 / ORDC5 = 1
D7: C6	Perform: Set to C6 mode	MORD_14 = 1 / ORDC6 = 1
D8: C7	Perform: Set to C7 mode	MORD_15 = 1 / ORDC7 = 1
D9: C8	Perform: Set to C8 mode	MORD_16 = 1 / ORDC8 = 1

4.11.2 MAX Dialog (Authority key)

4.11.2.1 Keyboard keys

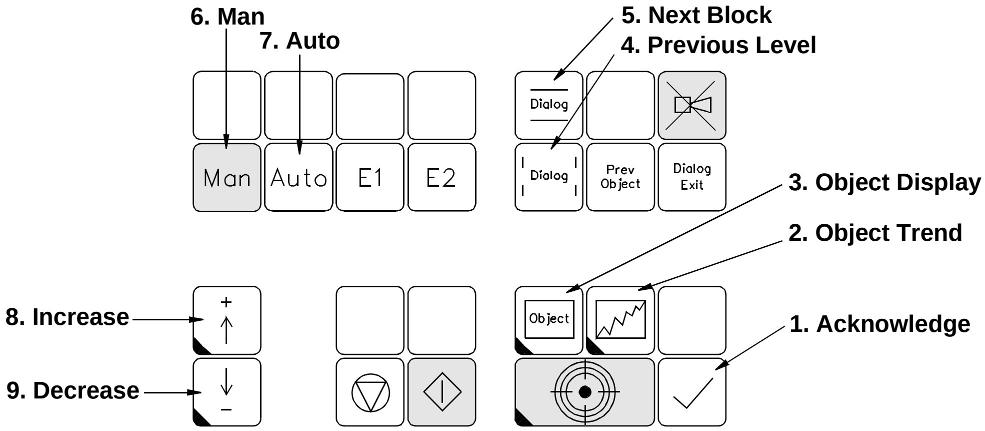


Figure 4-56. Keyboard keys

Key 1: Acknowledge	Perform: Acknowledge	AL_UNACK = 0
Key 2: Object Trend	Select: Object Trend	
Key 3: Object Display	Select: Object Display	
Key 4: Previous Level	Select Dynamic keys: Top Level	
Key 5: Next Block	Page between the dynamic key sets: Extend, Block, Limits and Keyboard	
Key 6: Man	Perform: Set to manual mode	MORD_04 = 1 / ORDMAN = 1
Key 7: Auto	Perform: Set to automatic mode	MORD_05 = 1 / ORDAUTO = 1
Key 8: Increase	Perform: Increase setpoint value with 0.5 % Increase setpoint 2 value with 0.5 % or at least 1.0	SETP SETP2
Key 8: Shift + Increase	Perform: Increase setpoint value with 5 % Increase setpoint 2 value with 5 % or at least 1.0	SETP SETP2
Key 9: Decrease	Perform: Decrease setpoint value with 0.5 % Decrease setpoint 2 value with 0.5 % or at least -1.0	SETP SETP2
Key 9: Shift + Decrease	Perform: Decrease setpoint value with 5 % Decrease setpoint 2 value with 5 % or at least -1.0	SETP SETP2

4.11.2.2 Dynamic keys, Top Level

D1 C1	D2 C2	D3 C3	D4 C4	D5 Extend...
D6 SP	D7 SP2	D8 Block...	D9 Limits...	D10 Keyboard...

Figure 4-57. Dynamic keys

D1: C1	Perform: Set to C1 mode	MORD_09 = 1 / ORDC1 = 1
D2: C2	Perform: Set to C2 mode	MORD_10 = 1 / ORDC2 = 1
D3: C3	Perform: Set to C3 mode	MORD_11 = 1 / ORDC3 = 1
D4: C4	Perform: Set to C4 mode	MORD_12 = 1 / ORDC4 = 1
D5: Extend...	Select Dynamic keys: Extend	
D6: SP	Pressed: Dialog for changing Setpoint value, value cyan	SETP
D7: SP2	Pressed: Dialog for changing Setpoint value, value cyan	SETP2
D8: Block...	Select Dynamic keys: Block	
D9: Limits...	Select Dynamic keys: Limits	
D10:Keyboard...	Select Dynamic keys: Keyboard	

4.11.2.3 Dynamic keys, Keyboard

D1 ↑ Increase	D2 Man	D3 Auto	D4	D5
D6 ↓ Decrease	D7 Acknowledge	D8 Object Display	D9 Object Trend	D10

Figure 4-58. Dynamic keys

D1: Increase	Perform: Increase setpoint value with 0.5 % Increase setpoint 2 value with 0.5 % or at least 1.0	SETP SETP2
D2: Man	Perform: Set to manual mode	MORD_04 = 1 / ORDMAN = 1
D3: Auto	Perform: Set to automatic mode	MORD_05 = 1 / ORDAUTO = 1
D6: Decrease	Perform: Decrease setpoint value with 0.5 % Decrease setpoint 2 value with 0.5 % or at least -1.0	SETP SETP2
D7: Acknowledge	Perform: Acknowledge	AL_UNACK = 0
D8: Object Display	Select: Object Display	
D9: Object Trend	Select: Object Trend	

4.11.2.4 Dynamic keys, Dynamic keys, Block

D1 Block Alarm	D2 Block Printout	D3 Block Event	D4	D5
D6 Deblock Alarm	D7 Deblock Printout	D8 Deblock Event	D9	D10

Figure 4-59. Dynamic keys

D1: Block Alarm	Pressed: yellow text Released: white text	AL_BLK = 1
D2: Block Printout	Pressed: yellow text Released: white text	PR_BLK = 1
D3: Block Event	Pressed: yellow text Released: white text	EV_BLK = 1
D6: Deblock Alarm	Pressed: green text Released: white text	AL_BLK = 0
D7: Deblock Printout	Pressed: green text Released: white text	PR_BLK = 0
D8: Deblock Event	Pressed: green text Released: white text	EV_BLK = 0

4.11.2.5 Dynamic keys, Limits

D1 H1 80.00	D2 H2 90.00	D3 SP H 70.00	D4 SP2 H 80.00	D5
D6 L1 20.00	D7 L2 10.00	D8 SP L 20.00	D9 SP2 L 30.00	D10

Figure 4-60. Dynamic keys

D1: H1	Pressed: Dialog for changing High Limit 1, value green	MVH1
D2: H2	Pressed: Dialog for changing High Limit 2, value green	MVH2
D3: SP H	Pressed: Dialog for changing Setpoint High, value cyan	SETPH
D5: SP2 H	Pressed: Dialog for changing Setpoint 2 High, value cyan	SETP2H
D6: L1	Pressed: Dialog for changing Low Limit 1, value green	MVL1
D7: L2	Pressed: Dialog for changing Low Limit 2, value green	MVL2
D8: SP L	Pressed: Dialog for changing Setpoint Low, value cyan	SETPL
D10: SP2 L	Pressed: Dialog for changing Setpoint 2 Low, value cyan	SETP2L

4.11.2.6 Dynamic keys, Extend

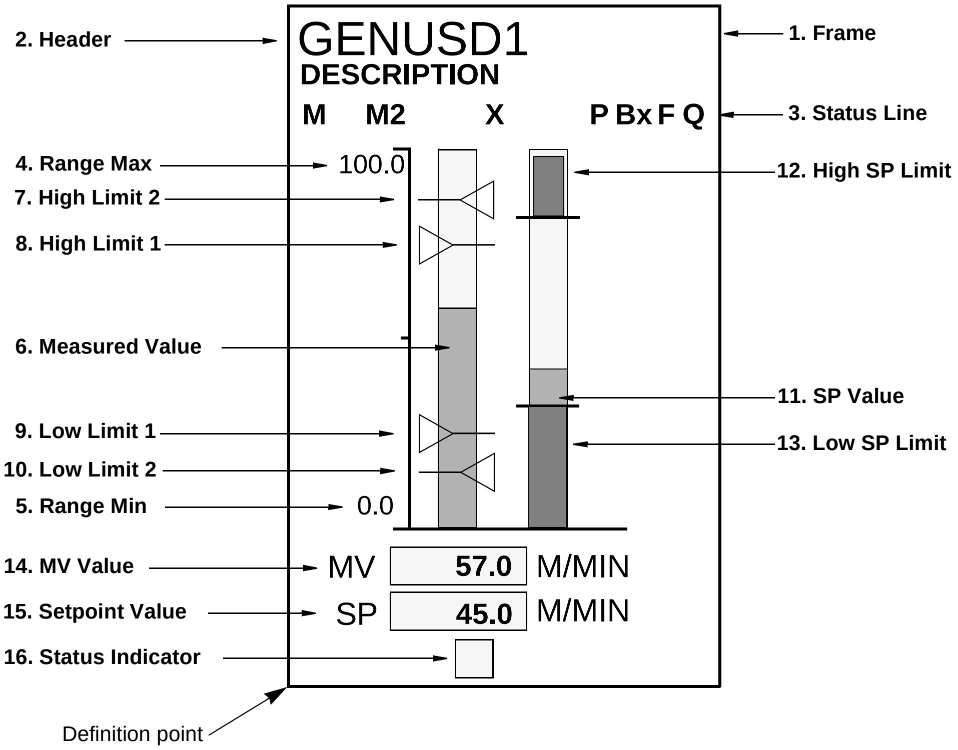
D1 M1	D2 M2	D3 M3	D4 Standby	D5 Blocked
D6 C5	D7 C6	D8 C7	D9 C8	D10

Figure 4-61. Dynamic keys

D1: M1	Perform: Set to M1 mode	MORD_01 = 1 / ORDM1 = 1
D2: M2	Perform: Set to M2 mode	MORD_02 = 1 / ORDM2 = 1
D3: M3	Perform: Set to M3 mode	MORD_03 = 1 / ORDM3 = 1
D4: Standby	Perform: Set to Standby mode	MORD_07 = 1 / ORDSTBY = 1
D5: Blocked	Perform: Set to Blocked mode	MORD_06 = 1 / ORDBLK = 1
D6: C5	Perform: Set to C5 mode	MORD_13 = 1 / ORDC5 = 1
D7: C6	Perform: Set to C6 mode	MORD_14 = 1 / ORDC6 = 1
D8: C7	Perform: Set to C7 mode	MORD_15 = 1 / ORDC7 = 1
D9: C8	Perform: Set to C8 mode	MORD_16 = 1 / ORDC8 = 1

4.11.3 GU1GR01

Presentation:



Behavior:

No	Description	Presentation	Condition	Remarks
1	**SelectFrame**	White	SELECTED = 1	*Object select frame*
		Black	-	
2	**Header**		NAME and DESCR	*Object name and description*
		Red flashing	AU_ST_00 = 1 or AU_ST_01 = 1 or AU_ST_02 = 1 or AU_ST_03 = 1 or AU_ST_04 = 1 or AU_ST_05 = 1 or AU_ST_06 = 1 or AU_ST_07 = 1	*Unacknowledged sign. error 1* *Unacknowledged sign. error 2* *Unacknowledged alarm 1* *Unacknowledged alarm 2* *Unacknowledged alarm 3* *Unacknowledged alarm 4* *Unacknowledged alarm 5* *Unacknowledged alarm 6*
		Red	ALQ1 = 1 or ALQ2 = 1 or ALF1 = 1 or ALF2 = 1 or ALF3 = 1 or ALF4 = 1 or ALF5 = 1 or ALF6 = 1	*Signal error 1* *Signal error 2* *Alarm 1* *Alarm 2* *Alarm 3* *Alarm 4* *Alarm 5* *Alarm 6*
		Green	-	*Normal*

No	Description	Presentation	Condition	Remarks
3	**Status Line**			*Status Line*
3.1	**Mode**	**M** Green	MAN = 1	*Manual mode* ManModeColor
		A Green	AUTO = 1	*Auto mode*
		B Green	BLK = 1	*Blocked mode*
		S Green	STBY = 1	*Standby mode*
3.2	**Control Point**	**M1** Magenta	M1 = 1	*Operator position M1*
		M2 Magenta	M2 = 1	*Operator position M2*
		M3 Magenta	M3 = 1	*Operator position M3*
3.3	**Interlock Indication**	**X** Yellow	INTLU1 = 1 or	*Interlock 1*
			INTLU2 = 1 or	*Interlock 2*
			INTLU3 = 1 or	*Interlock 3*
			INTLU4 = 1 or	*Interlock 4*
			INTLU5 = 1 or	*Interlock 5*
			INTLU6 = 1	*Interlock 6*
3.4	**Printout Blocked**	**P** Yellow	PR_BLK = 1	*Printout blocked*
3.5	**Alarm Blocked**	**B** Yellow	AL_BLK = 1	*Alarm blocked by operator*
		Bx Yellow	AUTO_BLK =1	*Alarm blocked by PC-program*
		Be Yellow	EV_BLK = 1	*Event blocked*
3.6	**Alarm Indication**	**F** Red	ALF1 = 1 or	*Alarm 1*
			ALF2 = 1 or	*Alarm 2*
			ALF3 = 1 or	*Alarm 3*
			ALF4 = 1 or	*Alarm 4*
			ALF5 = 1 or	*Alarm 5*
			ALF6 = 1	*Alarm 6*
3.7	**Signal Error**	**Q** *Red*	AALQ1 = 1 or	*Signal error 1*
			ALQ2 = 1	*Signal error 2*
4	**Range Max**		MAX	*Range Max of the MV value*
		Green	-	
5	**Range Min**		MIN	*Range Min of the MV value*
		Green	-	

No	Description	Presentation	Condition	Remarks
6	**Measured Value Bargraph**		MV	*Object measured value*
		Green	-	
7	**High Limit 2**		MVH2	*Alarm High limit 2*
	—◁	-	MVH2 >= MAX	*Invisible*
		Filled Yellow	MV > MVH2 and AL_BLK = 1	
		Unfilled Yellow	AL_BLK = 1	
		Filled Red	MV > MVH2	
		Unfilled Grey	-	
8	**High Limit 1**		MVH1	*Warning High limit 1*
	▷—	-	MVH1 >= MAX	*Invisible*
		Filled Yellow	MV > MVH1 and AL_BLK = 1	
		Unfilled Yellow	AL_BLK = 1	
		Filled Red	MV > MVH1	
		Unfilled Grey	-	
9	**Low Limit 1**		MVL1	*Warning Low limit 1*
	▷—	-	MVL1 <= MIN	*Invisible*
		Filled Yellow	MV < MVL1 and AL_BLK = 1	
		Unfilled Yellow	AL_BLK = 1	
		Filled Red	MV < MVL1	
		Unfilled Grey	-	
10	**Low Limit 2**		MVL2	*Alarm Low limit 2*
	—◁	-	MVL2 <= MIN	*Invisible*
		Filled Yellow	MV < MVL2 and AL_BLK = 1	
		Unfilled Yellow	AL_BLK = 1	
		Filled Red	MV < MVL2	
		Unfilled Grey	-	

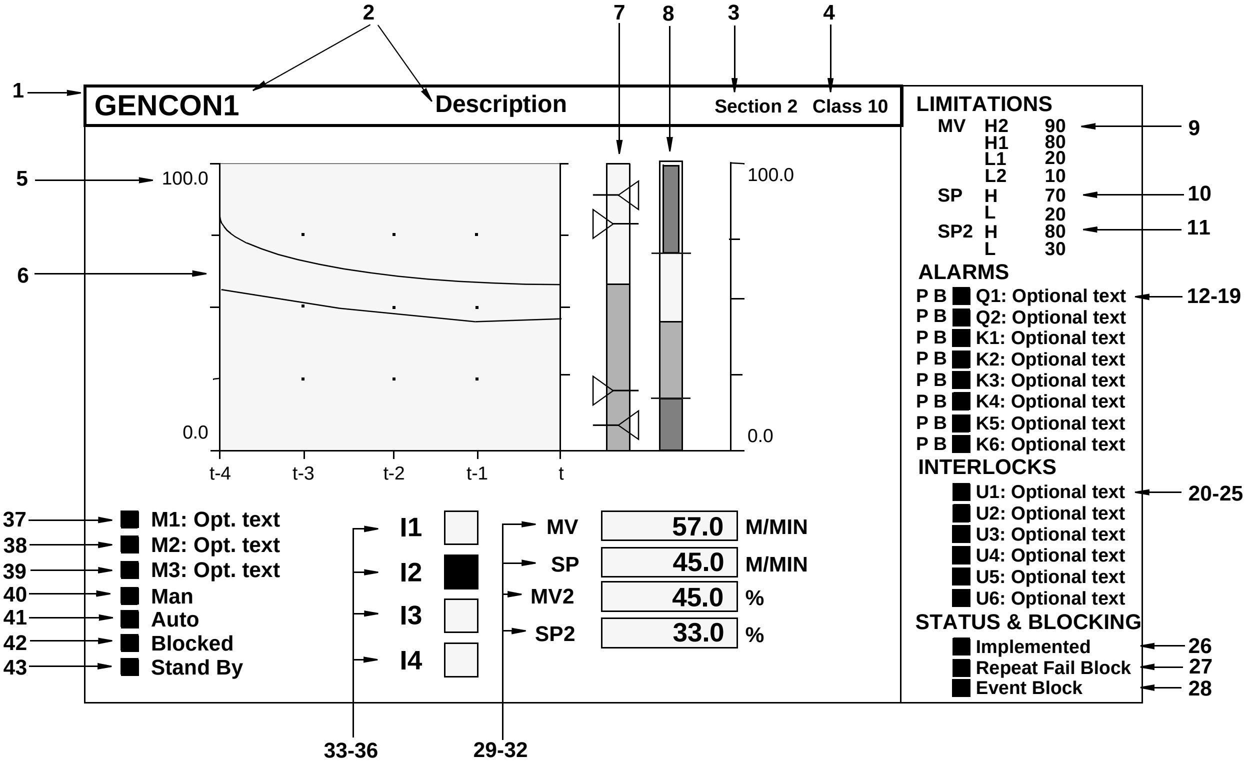
No	Description	Presentation	Condition	Remarks
11	**SP Value**		SP	*Object setpoint value*
		Cyan	-	
12	**High SP Limit**		SETPH	*Upper warning limit setpoint*
		-	SETPH > MAX	*Invisible*
		Yellow	SP > SETPH	*Limitation line and mesh*
		Grey	-	
13	**Low SP Limit**		SETPL	*Lower warning limit setpoint*
		-	SETPL < MIN	*Invisible*
		Yellow	SP < SETPL	*Limitation line and mesh*
		Grey	-	
14	**Measured Value**			*The MV object value*
14.1	**MV**	**MV** Grey		*Text in front of the value*
14.2	**MV Value**		MV	*Measured value*
		Green	-	
14.3	**MV Unit**		UNIT	*Measured unit*
		Green	-	
15	**Setpoint Value**			*The SP object value*
15.1	**SP**	**SP** Grey		*Text in front of the value*
15.2	**SP Value**		SP	*Setpoint value*
		Cyan	-	
15.3	**SP Unit**		UNIT	*Setpoint unit*
		Cyan	-	
16	**Status Indication**			*Status - Square indication*
		Filled Green	IND1 = 1	*On*
		Unfilled Green	IND1 = 0 and IND2 =1	*Off*

The conditions are in priority order. Underlined parameters are configurable.

Parameters	Affects	Options (bold is default)	Remarks
NameFont	2. Name	**FC50**, any font	
ManModeColor	3.1 Mode	**K5** (Green), any color	

4.11.4 GU1OB01

Presentation:



Behavior:

No	Description	Presentation	Condition	Remarks
1	**SelectFrame**	White	SELECTED = 1	*Object select frame*
		Black	-	
2	**Header**		NAME and DESCR	*Object name and description*
		Red flashing	AU_ST_00 = 1 or AU_ST_01 = 1 or AU_ST_02 = 1 or AU_ST_03 = 1 or AU_ST_04 = 1 or AU_ST_05 = 1 or AU_ST_06 = 1 or AU_ST_07 = 1	*Unacknowledged sign. error 1* *Unacknowledged sign. error 2* *Unacknowledged alarm 1* *Unacknowledged alarm 2* *Unacknowledged alarm 3* *Unacknowledged alarm 4* *Unacknowledged alarm 5* *Unacknowledged alarm 6*
		Red	ALQ1 = 1 or ALQ2 = 1 or ALF1 = 1 or ALF2 = 1 or ALF3 = 1 or ALF4 = 1 or ALF5 = 1 or ALF6 = 1	*Signal error 1* *Signal error 2* *Alarm 1* *Alarm 2* *Alarm 3* *Alarm 4* *Alarm 5* *Alarm 6*
		Green	-	*Normal*

No	Description	Presentation	Condition	Remarks
3.1	**Section Text**	**Section** Grey		*Text in front of the value*
3.2	**Section Value**	Green	PROC_SEC	*Process section*
4.1	**Class Text**	**Class** Grey		*Text in front of the value*
4.2	**Class Value**	Green	CLASS	*Object class*
5.1	**Range MV Max**		MAX	*Range Max of the MV value*
		Green	-	
5.2	**Range MV Min**		MIN	*Range Min of the MV value*
		Green	-	
6	**Measure Value Trim Curve**		MV	*Object measure value*
		Green	-	
	Setpoint Value Trim Curve		SP	*Object setpoint value*
		Cyan	-	
7.1	**Measured Value Bargraph**		MV	*Object value*
		Green	-	
7.2	**High Limit 2**		MVH2	*Alarm High limit 2*
	—◁	-	MVH2 >= MAX	*Invisible*
		Filled Yellow	MV > MVH2 and AL_BLK = 1	
		Unfilled Yellow	AL_BLK = 1	
		Filled Red	MV > MVH2	
		Unfilled Grey	-	
7.3	**High Limit 1**		MVH1	*Warning High limit 1*
	▷—	-	MVH1 >= MAX	*Invisible*
		Filled Yellow	MV > MVH1 and AL_BLK = 1	
		Unfilled Yellow	AL_BLK = 1	
		Filled Red	MV > MVH1	
		Unfilled Grey	-	
7.4	**Low Limit 1**		MVL1	*Warning Low limit 1*
	▷—	-	MVL1 <= MIN	*Invisible*
		Filled Yellow	MV < MVL1 and AL_BLK = 1	
		Unfilled Yellow	AL_BLK = 1	
		Filled Red	MV < MVL1	
		Unfilled Grey	-	

No	Description	Presentation	Condition	Remarks
7.5	**Low Limit 2**		MVL2	*Alarm Low limit 2*
	—◁	-	MVL2 <= MIN	*Invisible*
		Filled Yellow	MV < MVL2 and AL_BLK = 1	
		Unfilled Yellow	AL_BLK = 1	
		Filled Red	MV < MVL2	
		Unfilled Grey	-	
8.1	**SP Value**		SP	*Object setpoint value*
		Cyan	-	
8.2	**High SP Limit**		SETPH	*Upper warning limit setpoint*
		-	SETPH > MAX	*Invisible*
		Yellow	SP > SETPH	*Limitation line and mesh*
		Grey	-	
8.3	**Low SP Limit**		SETPL	*Lower warning limit setpoint*
		-	SETPL < MIN	*Invisible*
		Yellow	SP < SETPL	*Limitation line and mesh*
		Grey	-	
9	**LIMITATIONS for MV**			*Alarm limits for MV*
9.1	**MV Text**	**MV** Grey		*Text in front of the line*
9.2	**H2 Text**	**H2** Grey		*Text in front of the value*
9.3	**H2 Value**		MVH2	*High limit 2 value*
		Green	-	
9.4	**H1 Text**	**H1** Grey		*Text in front of the value*
9.5	**H1 Value**		MVH1	*High limit 1 value*
		Green	-	
9.6	**L1 Text**	**L1** Grey		*Text in front of the value*
9.7	**L1 Value**		MVL1	*Low limit 1 value*
		Green	-	
9.8	**L2 Text**	**L2** Grey		*Text in front of the value*
9.9	**L2 Value**		MVL2	*Low limit 2 value*
		Green	-	

No	Description	Presentation	Condition	Remarks
10	**LIMITATIONS for SP**			*Limitations for SP*
10.1	**SP Text**	**SP** Grey		*Text in front of the line*
10.2	**H Text**	**H** Grey		*Text in front of the value*
10.3	**H Value**		SETPH	*Setpoint High value*
		Cyan	-	
10.4	**L Text**	**L** Grey		*Text in front of the value*
10.5	**L Value**		SETPL	*Setpoint Low value*
		Cyan	-	
11	**LIMITATIONS for SP2**			*Limitations for SP2*
11.1	**SP2 Text**	**SP2** Grey		*Text in front of the line*
11.2	**H Text**	**H** Grey		*Text in front of the value*
11.3	**H Value**		SETP2H	*Setpoint High 2 value*
		Magenta	-	
11.4	**L Text**	**L** Grey		*Text in front of the value*
11.5	**L Value**		SETP2L	*Setpoint Low 2 value*
		Magenta	-	
12	**ALARMS**			*Alarms*
12.1	**Printout Blocked**	**P** Yellow	PR_BLK = 1	*Printout blocked*
12.2	**Alarm Blocked**	**B** Yellow	AL_BLK = 1	*Alarm blocked by operator*
		Bx Yellow	AUTO_BLK = 1	*Alarm blocked by PC-program*
12.3	**Alarm Indication**	■ Red flashing	ALQ1 = 1 and AU_ST_00 =1	*Signal error 1*
		■ Red	ALQ1 = 1	
12.4	**User defined text**	**Q1: Optional text**		*User defined text*
		Red	ALQ1 = 1 or AU_ST_00 =1	*Alarm or* *Unacknowledged alarm*
		Grey	-	
13.1	**Printout Blocked**	**P** Yellow	PR_BLK = 1	*Printout blocked*
13.2	**Alarm Blocked**	**B** Yellow	AL_BLK = 1	*Alarm blocked by operator*
		Bx Yellow	AUTO_BLK = 1	*Alarm blocked by PC-program*
13.3	**Alarm Indication**	■ Red flashing	ALQ2 = 1 and AU_ST_01 =1	*Signal error 2*
		■ Red	ALQ2 = 1	
13.4	**User defined text**	**Q2: Optional text**		*User defined text*
		Red	ALQ2 = 1 or AU_ST_01 =1	*Alarm or* *Unacknowledged alarm*
		Grey	-	

No	Description	Presentation	Condition	Remarks
14.1	**Printout Blocked**	**P** Yellow	PR_BLK = 1	*Printout blocked*
14.2	**Alarm Blocked**	**B** Yellow	AL_BLK = 1	*Alarm blocked by operator*
		Bx Yellow	AUTO_BLK = 1	*Alarm blocked by PC-program*
14.3	**Alarm Indication**	■ Red flashing	ALF1 = 1 and AU_ST_02 =1	*Alarm 1*
		■ Red	ALF1 = 1	
14.4	**User defined text**	**K1: Optional text**		*User defined text*
		Red	ALF1 = 1 or AU_ST_02 =1	*Alarm or Unacknowledged alarm*
		Grey	-	
15.1	**Printout Blocked**	**P** Yellow	PR_BLK = 1	*Printout blocked*
15.2	**Alarm Blocked**	**B** Yellow	AL_BLK = 1	*Alarm blocked by operator*
		Bx Yellow	AUTO_BLK = 1	*Alarm blocked by PC-program*
15.3	**Alarm Indication**	■ Red flashing	ALF2 = 1 and AU_ST_03 =1	*Alarm 2*
		■ Red	ALF2 = 1	
15.4	**User defined text**	**K2: Optional text**		*User defined text*
		Red	ALF2 = 1 or AU_ST_03 =1	*Alarm or Unacknowledged alarm*
		Grey	-	
16.1	**Printout Blocked**	**P** Yellow	PR_BLK = 1	*Printout blocked*
16.2	**Alarm Blocked**	**B** Yellow	AL_BLK = 1	*Alarm blocked by operator*
		Bx Yellow	AUTO_BLK = 1	*Alarm blocked by PC-program*
16.3	**Alarm Indication**	■ Red flashing	ALF3 = 1 and AU_ST_04 =1	*Alarm 3*
		■ Red	ALF3 = 1	
16.4	**User defined text**	**K3: Optional text**		*User defined text*
		Red	ALF3 = 1 or AU_ST_04 =1	*Alarm or Unacknowledged alarm*
		Grey	-	
17.1	**Printout Blocked**	**P** Yellow	PR_BLK = 1	*Printout blocked*
17.2	**Alarm Blocked**	**B** Yellow	AL_BLK = 1	*Alarm blocked by operator*
		Bx Yellow	AUTO_BLK = 1	*Alarm blocked by PC-program*
17.3	**Alarm Indication**	■ Red flashing	ALF4 = 1 and AU_ST_05 =1	*Alarm 4*
		■ Red	ALF4 = 1	
17.4	**User defined text**	**K4: Optional text**		*User defined text*
		Red	ALF4 = 1 or AU_ST_05 = 1	*Alarm or Unacknowledged alarm*
		Grey	-	

No	Description	Presentation	Condition	Remarks
18.1	**Printout Blocked**	**P** Yellow	PR_BLK = 1	*Printout blocked*
18.2	**Alarm Blocked**	**B** Yellow	AL_BLK = 1	*Alarm blocked by operator*
		Bx Yellow	AUTO_BLK = 1	*Alarm blocked by PC-program*
18.3	**Alarm Indication**	■ Red flashing	ALF5 = 1 and AU_ST_06 =1	*Alarm 5*
		■ Red	ALF5 = 1	
18.4	**User defined text**	**K5: Optional text**		*User defined text*
		Red	ALF5 = 1 or AU_ST_06 = 1	*Alarm or* *Unacknowledged alarm*
		Grey	-	
19.1	**Printout Blocked**	**P** Yellow	PR_BLK = 1	*Printout blocked*
19.2	**Alarm Blocked**	**B** Yellow	AL_BLK = 1	*Alarm blocked by operator*
		Bx Yellow	AUTO_BLK = 1	*Alarm blocked by PC-program*
19.3	**Alarm Indication**	■ Red flashing	ALF6 = 1 and AU_ST_07 =1	*Alarm 6*
		■ Red	ALF6 = 1	
19.4	**User defined text**	**K6: Optional text**		*User defined text*
		Red	ALF6 = 1 or AU_ST_07 = 1	*Alarm or* *Unacknowledged alarm*
		Grey	-	
20	**INTERLOCKS**			*Interlocks*
20.1	**Interlock Indication**	■ Yellow	INTLU1 = 1	*Interlock 1*
20.2	**User defined text**	**U1: Optional text**		*User defined text*
		Yellow	INTLU1 = 1	*Interlocked*
		Grey	-	
21.1	**Interlock Indication**	■ Yellow	INTLU2 = 1	*Interlock 2*
21.2	**User defined text**	**U2: Optional text**		*User defined text*
		Yellow	INTLU2 = 1	*Interlocked*
		Grey	-	
22.1	**Interlock Indication**	■ Yellow	INTLU3 = 1	*Interlock 3*
22.2	**User defined text**	**U3: Optional text**		*User defined text*
		Yellow	INTLU3 = 1	*Interlocked*
		Grey	-	

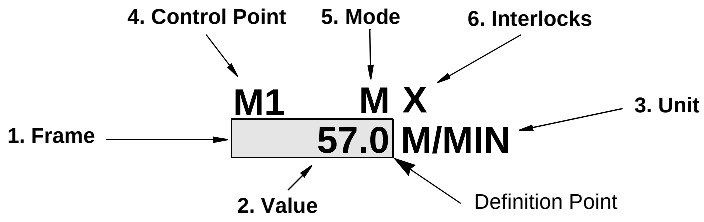
No	Description	Presentation	Condition	Remarks
23.1	**Interlock Indication**	■ Yellow	INTLU4 = 1	*Interlock 4*
23.2	**User defined text**	**U4: Optional text**		*User defined text*
		Yellow	INTLU4 = 1	*Interlocked*
		Grey	-	
24.1	**Interlock Indication**	■ Yellow	INTLU5 = 1	*Interlock 5*
24.2	**User defined text**	**U5: Optional text**		*User defined text*
		Yellow	INTLU5 = 1	*Interlocked*
		Grey	-	
25.1	**Interlock Indication**	■ Yellow	INTLU6 = 1	*Interlock 6*
25.2	**User defined text**	**U6: Optional text**		*User defined text*
		Yellow	INTLU6 = 1	*Interlocked*
		Grey	-	
26	**STATUS & BLOCKING**			*Status and Blocking*
26.1	**Implemented Indication**	■ Green	ACT = 1	*Implemented*
26.2	**Implemented text**	**Implemented**		*Implemented text*
		Grey		
27.1	**Repeat Fail Block Indication**	■ Yellow	RP_BLK = 1	*Repeat Fail Block*
27.2	**Repeat Fail Block text**	**Repeat Fail Blk**		*Repeat Fail Block text*
		Yellow	RP_BLK = 1	
		Grey	-	
28.1	**Event Block Indication**	■ Yellow	EV_BLK = 1	*Event Block*
28.2	**Event Block text**	**Event Block**		*Event Block text*
		Yellow	EV_BLK = 1	
		Grey	-	
29	**Measured Value**			*The MV object value*
29.1	**MV**	**MV** Grey		*Text in front of the value*
29.2	**MV Value**		MV	*Measured value*
		Green	-	
29.3	**MV Unit**		UNIT	*Measured unit*
		Green	-	

No	Description	Presentation	Condition	Remarks
30	**Setpoint Value**			*The SP object value*
30.1	**SP**	**SP** Grey		*Text in front of the value*
30.2	**SP Value**		SP	*Setpoint value*
		Cyan	-	
30.3	**SP Unit**		UNIT	*Setpoint unit*
		Cyan	-	
31	**Measured 2 Value**			*The MV2 object value*
31.1	**MV2 Text**	**MV2** Grey		*Text in front of the value*
31.2	**MV2 Value**		MV2	*Measured 2 value*
		Green	-	
31.3	**MV2 Unit**		UNIT2	*Measured 2 unit*
		Green	-	
32	**Setpoint 2 Value**			*The SP2 object value*
32.1	**SP2 Text**	**SP2** Grey		*Text in front of the value*
32.2	**SP2 Value**		SETP2	*Setpoint 2 value*
		Cyan	-	
32.3	**SP2 Unit**		UNIT2	*Setpoint 2 unit*
		Cyan	-	
33.1	**I1 Text**	**I1** Grey		*I1-text*
33.2	**I1 Indication**	Filled Green	IND1 = 1	*On - Square indication*
		Unfilled Green	IND1 = 0	*Off - Square indication*
34.1	**I2 Text**	**I2** Grey		*I2-text*
34.2	**I2 Indication**	Filled Green	IND2 = 1	*On - Square indication*
		Unfilled Green	IND2 = 0	*Off - Square indication*
35.1	**I3 Text**	**I3** Grey		*I3-text*
35.2	**I3 Indication**	Filled Green	IND3 = 1	*On - Square indication*
		Unfilled Green	IND3 = 0	*Off - Square indication*
36.1	**I4 Text**	**I4** Grey		*I4-text*
36.2	**I4 Indication**	Filled Green	IND4 = 1	*On - Square indication*
		Unfilled Green	IND4 = 0	*Off - Square indication*

No	Description	Presentation	Condition	Remarks
37.1	**M1 Indication**	■ Green	M1 = 1	*Operator position indication*
37.2	**User defined text**	**M1: Opt. text**		*User defined text*
		Green	M1 = 1	
		Grey	-	
38.1	**M2 Indication**	■ Green	M2 = 1	*Operator position indication*
38.2	**User defined text**	**M2: Opt. text**		*User defined text*
		Green	M2 = 1	
		Grey	-	
39.1	**M3 Indication**	■ Green	M3 = 1	*Operator position indication*
39.2	**User defined text**	**M3: Opt. text**		*User defined text*
		Green	M3 = 1	
		Grey	-	
40.1	**Man Indication**	■ Green	MAN = 1	*Manual mode*
40.2	**Man text**	**Man**		*Man text*
		Green	MAN = 1	
		Grey	-	
41.1	**Auto Indication**	■ Green	AUTO = 1	*Auto mode*
41.2	**Auto text**	**Auto**		*Auto text*
		Green	AUTO = 1	
		Grey	-	
42.1	**Blocked Indication**	■ Green	BLK = 1	*Blocked mode*
42.2	**Blocked text**	**Blocked**		*Blocked text*
		Green	BLK = 1	
		Grey	-	
43.1	**Stand By indication**	■ Green filled	STBY = 1	*Stand By mode*
43.2	**Stand By text**	**Stand By**		*Stand By text*
		Green	STBY = 1	
		Grey	-	

4.11.5 GU1PD01

Presentation:



Behavior:

No	Description	Presentation	Condition	Remarks
1	**SelectFrame**	White	SELECTED = 1	*Selected*
		Dotted Yellow	AL_BK = 1	*Alarm blocked by operator*
		Black	-	FrameColor
2	**Measured Value**		MV	*Object value*
		Red flashing	AU_ST_00 =1 or AU_ST_01 =1 or AU_ST_02 =1 or AU_ST_03 =1 or AU_ST_04 =1 or AU_ST_05 =1 or AU_ST_06 =1 or AU_ST_07 =1	*Unacknowledged alarm*
		Red	ALQ1 = 1 or ALQ2 = 1 or ALF1 = 1 or ALF2 = 1 or ALF3 = 1 or ALF4 = 1 or ALF5 = 1 or ALF6 = 1	*Alarm*
		Green	-	NormalColor
3	**Unit**		UnitVisible = onRequest	*Object unit*
		Green	UNIT	NormalColor
		-	UnitVisible = noSubscription	*Unit is invisible*
4	**Control Point**		ControlPointVisible = true	*Object mode*
		M1 Magenta	M1 = 1	*Operator position M1* ControlPointColor
		M2 Magenta	M2 = 1	*Operator position M2* ControlPointColor
		M3 Magenta	M3 = 1	*Operator position M3* ControlPointColor
		-	ControlPointVisible = false	*Operator position is invisible*

No	Description	Presentation	Condition	Remarks
5	**Mode**		ModeVisible = true	*Object mode*
		M Green	MAN = 1	*Manual mode* ManModeColor
		A Green	AUTO = 1	*Auto mode* AutoModeColor
		B Green	BLK = 1	*Blocked mode* ModeColor
		S Green	STBY = 1	*Standby mode* ModeColor
		-	ModeVisible = false	*Mode is invisible*
6	**Interlocks**		InterlockVisible = true	*Object interlock*
		X Yellow	INTLU1 = 1 or INTLU2 = 1 or INTLU3 = 1 or INTLU4 = 1 or INTLU5 = 1 or INTLU6 = 1 or	*Interlock 1* InterlockColor *Interlock 2* *Interlock 3* *Interlock 4* *Interlock 5* *Interlock 6*
		-	InterlockVisible = false	*Interlock is invisible*

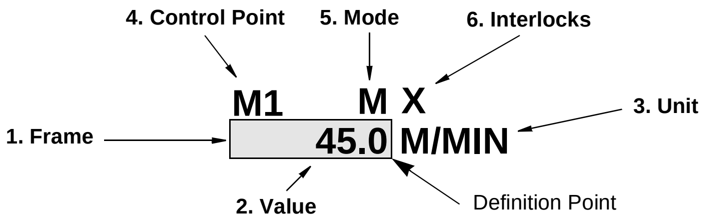
The conditions are in priority order. Underlined parameters are configurable.

Configuration:

Parameters	Affects	Options (bold is default)	Remarks
ModeVisible	5. Mode	**true**, false	
ControlPointVisible	4. Control Point	**true**, false	
InterlockVisible	6. Interlocks	**true**, false	
UnitVisible	3. Unit	**onRequest**, noSubscription	
NormalColor	2. Measured Value and 3. Unit	**K5** (Green), any color	
ModeColor	5. Mode	**K5** (Green), any color	
ManModeColor	5. Mode	**K5** (Green), any color	
AutoModeColor	5. Mode	**K5** (Green), any color	
ControlPointColor	4. Control Point	**K11** (Magenta), any color	
InterlockColor	6. Interlocks	**K3** (Yellow), any color	
SelectAreaColor	1. SelectArea	**K16** (Black), any color	*Background color and deletion color*
Font	2. Measured Value and 3. Unit	**FA40**, any font	
FrameColor	1. SelectFrame	**K16** (Black), any color	
FrameWidth	1. SelectFrame	**2**, (1..4)	
NumberOfChar	2. Measured Value	**7**	*Include "**.**" and "**-**"*
UseDisplayColor	5. Mode	**false**, true	*true if DisplayColor is used*
DisplayColor	5. Mode	**N13** (Black), any color	*BG for Mode if UseDisplayColor is true*

4.11.6 GU1PD02

Presentation:



Behavior:

No	Description	Presentation	Condition	Remarks
1	**SelectFrame**	White	SELECTED = 1	*Selected*
		Dotted Yellow	ALARM_BK = 1	*Alarm blocked by operator*
		Black	-	FrameColor
2	**Setpoint Value**		SP	*Object setpoint value*
		Red flashing	AU_ST_00 =1 or AU_ST_01 =1 or AU_ST_02 =1 or AU_ST_03 =1 or AU_ST_04 =1 or AU_ST_05 =1 or AU_ST_06 =1 or AU_ST_07 =1	*Unacknowledged alarm*
		Red	ALQ1 = 1 or ALQ2 = 1 or ALF1 = 1 or ALF2 = 1 or ALF3 = 1 or ALF4 = 1 or ALF5 = 1 or ALF6 = 1	*Alarm*
		Cyan	-	NormalColor
3	**Unit**		UnitVisible = onRequest	*Object unit*
		Cyan	UNIT	NormalColor
		-	UnitVisible = noSubscription	*Unit is invisible*
4	**Control Point**		ControlPointVisible = true	*Object mode*
		M1 Magenta	M1 = 1	*Operator position M1* ControlPointColor
		M2 Magenta	M2 = 1	*Operator position M2* ControlPointColor
		M3 Magenta	M3 = 1	*Operator position M3* ControlPointColor
		-	ControlPointVisible = false	*Operator position is invisible*

No	Description	Presentation	Condition	Remarks
5	**Mode**		ModeVisible = true	*Object mode*
		M Green	MAN = 1	*Manual mode* ManModeColor
		A Green	AUTO = 1	*Auto mode* AutoModeColor
		B Green	BLK = 1	*Blocked mode* ModeColor
		S Green	STBY = 1	*Standby mode* ModeColor
		-	ModeVisible = false	*Mode is invisible*
6	**Interlocks**		InterlockVisible = true	*Object interlock*
		X Yellow	INTLU1 = 1 or INTLU2 = 1 or INTLU3 = 1 or INTLU4 = 1 or INTLU5 = 1 or INTLU6 = 1 or	*Interlock 1* InterlockColor *Interlock 2* *Interlock 3* *Interlock 4* *Interlock 5* *Interlock 6*
		-	InterlockVisible = false	*Interlock is invisible*

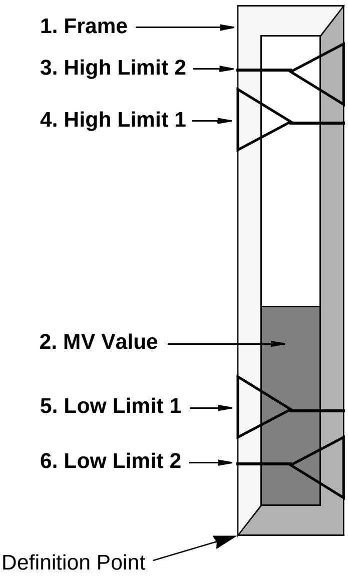
The conditions are in priority order. Underlined parameters are configurable.

Configuration:

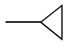
Parameters	Affects	Options (bold is default)	Remarks
ModeVisible	5. Mode	**true**, false	
ControlPointVisible	4. Control Point	**true**, false	
InterlockVisible	6. Interlocks	**true**, false	
UnitVisible	3. Unit	**onRequest**, noSubscription	
NormalColor	2. Setpoint Value and 3. Unit	**K5** (Green), any color	
ModeColor	5. Mode	**K5** (Green), any color	
ManModeColor	5. Mode	**K5** (Green), any color	
AutoModeColor	5. Mode	**K5** (Green), any color	
ControlPointColor	4. Control Point	**K11** (Magenta), any color	
InterlockColor	6. Interlocks	**K3** (Yellow), any color	
SelectAreaColor	1. SelectArea	**K16** (Black), any color	*Background color and deletion color*
Font	2. Setpoint Value and 3. Unit	**FA40**, any font	
FrameColor	1. SelectFrame	**K16** (Black), any color	
FrameWidth	1. SelectFrame	**2**, (1..4)	
NumberOfChar	2. Setpoint Value	**7**	*Include "**.**" and "**-**"*
UseDisplayColor	5. Mode	**false**, true	*true if DisplayColor is used*
DisplayColor	5. Mode	**N13** (Black), any color	*BG for Mode if UseDisplayColor is true*

4.11.7 GU1PD51

Presentation:



Behavior:

No	Description	Presentation	Condition	Remarks
1.1	**SelectFrame**	White	SELECTED = 1	*Object frame*
		Black	-	FrameColor
1.2	**TopLeftEdge**			*Three Dimensions effect*
		Grey		TopLeftColor
1.3	**BottomRightEdge**			*Three Dimensions effect*
		Grey		BottomRightColor
2	**Measured Value**		MV	*Object value*
		Red flashing	AU_ST_00 =1 or AU_ST_01 =1 or AU_ST_02 =1 or AU_ST_03 =1 or AU_ST_04 =1 or AU_ST_05 =1 or AU_ST_06 =1 or AU_ST_07 =1	*Unacknowledged alarm*
		Red	ALQ1 = 1 or ALQ2 = 1 or ALF1 = 1 or ALF2 = 1 or ALF3 = 1 or ALF4 = 1 or ALF5 = 1 or ALF6 = 1	*Alarm*
		Green	-	NormalColor
3	**High Limit 2**		MVH2	*Alarm High limit 2*
		-	MVH2 >= MAX	*Invisible*
		Filled Yellow	MV > MVH2 and AL_BLK = 1	
		Unfilled Yellow	AL_BLK = 1	
		Filled Red	MV > MVH2	
		Unfilled Grey	-	LimitColor

No	Description	Presentation	Condition	Remarks
4	**High Limit 1**		MVH1	*Warning High limit 1*
	▷—	-	MVH1 >= MAX	*Invisible*
		Filled Yellow	MV > MVH1 and AL_BLK = 1	
		Unfilled Yellow	AL_BLK = 1	
		Filled Red	MV > MVH1	
		Unfilled Grey	-	LimitColor
5	**Low Limit 1**		MVL1	*Warning Low limit 1*
	▷—	-	MVL1 <= MIN	*Invisible*
		Filled Yellow	MV < MVL1 and AL_BLK = 1	
		Unfilled Yellow	AL_BLK = 1	
		Filled Red	MV < MVL1	
		Unfilled Grey	-	LimitColor
6	**Low Limit 2**		MVL2	*Alarm Low limit 2*
	—◁	-	MVL2 <= MIN	*Invisible*
		Filled Yellow	MV < MVL2 and AL_BLK = 1	
		Unfilled Yellow	AL_BLK = 1	
		Filled Red	MV < MVL2	
		Unfilled Grey	-	LimitColor

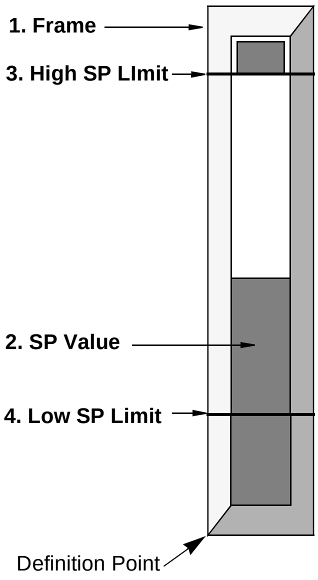
The conditions are in priority order. Underlined parameters are configurable.

Configuration:

Parameters	Affects	Options (bold is default)	Remarks
NormalColor	2. Measured Value	**K5** (Green), any color	
TopLeftColor	1.2 TopLeftEdge	**N13** (Grey), any color	*Regarding the choice of the color it will be three dimension effect*
BottomRightColor	1.3 BottomRightEdge	**N13** (Grey), any color	
FrameColor	1.1 SelectFrame	**K16** (Black), any color	
FrameWidth	1.1 SelectFrame	**2**, (1..4)	
BarBackColor	2. Measured Value	**K16** (Black), any color	*Background color of the bargraph*
LimitColor	3. High Limit 2, 4. High Limit 1, 5. Low Limit 1 and 6. Low Limit 2	**M16** (Grey), any color	*Color of the limit arrows*

4.11.8 GU1PD52

Presentation:



Behavior:

No	Description	Presentation	Condition	Remarks
1.1	**SelectFrame**	White	SELECTED = 1	*Object frame*
		Black	-	FrameColor
1.2	**TopLeftEdge**			*Three Dimensions effect*
		Grey		TopLeftColor
1.3	**BottomRightEdge**			*Three Dimensions effect*
		Grey		BottomRightColor
2	**Setpoint Value**		SP	*Object setpoint value*
		Red flashing	AU_ST_00 =1 or AU_ST_01 =1 or AU_ST_02 =1 or AU_ST_03 =1 or AU_ST_04 =1 or AU_ST_05 =1 or AU_ST_06 =1 or AU_ST_07 =1	*Unacknowledged alarm*
		Red	ALQ1 = 1 or ALQ2 = 1 or ALF1 = 1 or ALF2 = 1 or ALF3 = 1 or ALF4 = 1 or ALF5 = 1 or ALF6 = 1	*Alarm*
		Cyan		NormalColor
3	**High SP Limit**		SETPH	*Upper warning limit setpoint*
		-	SETPH > MAX	*Invisible*
		Yellow	SP > SETPH	*Limitation line and mesh*
		Grey	-	LimitationColor

No	Description	Presentation	Condition	Remarks
4	**Low SP Limit**		SETPL	*Lower warning limit setpoint*
		-	SETPL < MIN	*Invisible*
		Yellow	SP < SETPL	*Limitation line and mesh*
		Grey	-	LimitationColor

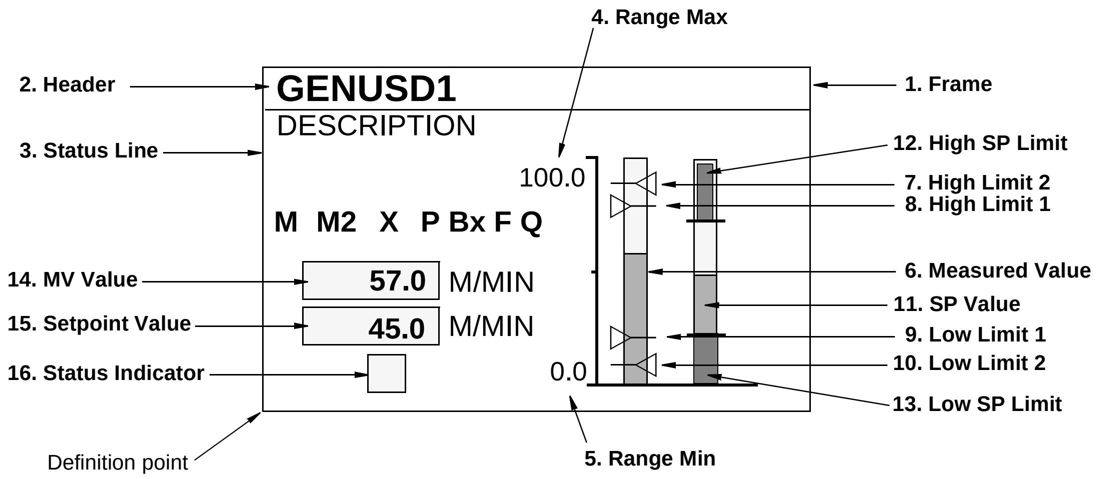
The conditions are in priority order. Underlined parameters are configurable.

Configuration:

Parameters	Affects	Options (bold is default)	Remarks
NormalColor	2. Setpoint Value	**K9** (Cyan), any color	
TopLeftColor	1.2 TopLeftEdge	**N13** (Grey), any color	*Regarding the choice of the color it will be three dimension effect*
BottomRightColor	1.3 BottomRightEdge	**N13** (Grey), any color	
FrameColor	1.1 SelectFrame	**K16** (Black), any color	
FrameWidth	1.1 SelectFrame	**2**, (1..4)	
BarBackColor	2. Setpoint Value	**K16** (Black), any color	*Background color of the bargraph*
LimitationColor	3. High SP Limit and 4. Low SP Limit	**M16** (Grey), any color	*Color of the limit arrows*

4.11.9 GU1WI01

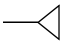
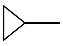
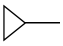
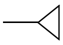
Presentation:



Behavior:

No	Description	Presentation	Condition	Remarks
1	**Select Frame**			*Object select frame*
		White	SELECTED = 1	*Only for overlap*
		Black	-	*Normal*
2	**Header**		NAME and DESCR	*Object name and description*
		Red flashing	AU_ST_00 = 1 or AU_ST_01 = 1 or AU_ST_02 = 1 or AU_ST_03 = 1 or AU_ST_04 = 1 or AU_ST_05 = 1 or AU_ST_06 = 1 or AU_ST_07 = 1	*Unacknowledged sign. error 1* *Unacknowledged sign. error 2* *Unacknowledged alarm 1* *Unacknowledged alarm 2* *Unacknowledged alarm 3* *Unacknowledged alarm 4* *Unacknowledged alarm 5* *Unacknowledged alarm 6*
		Red	ALQ1 = 1 or ALQ2 = 1 or ALF1 = 1 or ALF2 = 1 or ALF3 = 1 or ALF4 = 1 or ALF5 = 1 or ALF6 = 1	*Signal error 1* *Signal error 2* *Alarm 1* *Alarm 2* *Alarm 3* *Alarm 4* *Alarm 5* *Alarm 6*
		Green	-	*Normal*

No	Description	Presentation	Condition	Remarks
3	**Status Line**			*Status Line*
3.1	**Mode**	**M** Green	MAN = 1	*Manual mode*
		A Green	AUTO = 1	*Auto mode*
		B Green	BLK = 1	*Blocked mode*
		S Green	STBY = 1	*Standby mode*
3.2	**Control Point**	**M1** Magenta	M1 = 1	*Operator position M1*
		M2 Magenta	M2 = 1	*Operator position M2*
		M3 Magenta	M3 = 1	*Operator position M3*
3.3	**Interlock Indication**	**X** Yellow	INTLU1 = 1 or INTLU2 = 1 or INTLU3 = 1 or INTLU4 = 1 or INTLU5 = 1 or INTLU6 = 1	*Interlock 1* *Interlock 2* *Interlock 3* *Interlock 4* *Interlock 5* *Interlock 6*
3.4	**Printout Blocked**	**P** Yellow	PR_BLK = 1	*Printout blocked*
3.5	**Alarm Blocked**	**B** Yellow	AL_BLK = 1	*Alarm blocked*
		Bx Yellow	AUTO_BLK =1	*Alarm blocked with PC-program*
		Be Yellow	EV_BLK = 1	*Event blocked*
3.6	**Alarm Indication**	**F** Red	ALF1 = 1 or ALF2 = 1 or ALF3 = 1 or ALF4 = 1 or ALF5 = 1 or ALF6 = 1	*Alarm 1* *Alarm 2* *Alarm 3* *Alarm 4* *Alarm 5* *Alarm 6*
3.7	**Signal Error**	**Q** *Red*	ALQ1 = 1 or ALQ2 = 1	*Signal error 1* *Signal error 2*
4	**Range Max**		MAX	*Range Max of the MV value*
		Green	-	
5	**Range Min**		MIN	*Range Min of the MV value*
		Green	-	
6	**Measured Value Bargraph**		MV	*Object measured value*
		Green	-	

No	Description	Presentation	Condition	Remarks
7	**High Limit 2**		MVH2	*Alarm High limit 2*
		-	MVH2 >= MAX	*Invisible*
		Filled Yellow	MV > MVH2 and AL_BLK = 1	
		Unfilled Yellow	AL_BLK = 1	
		Filled Red	MV > MVH2	
		Unfilled Grey	-	
8	**High Limit 1**		MVH1	*Warning High limit 1*
		-	MVH1 >= MAX	*Invisible*
		Filled Yellow	MV > MVH1 and AL_BLK = 1	
		Unfilled Yellow	AL_BLK = 1	
		Filled Red	MV > MVH1	
		Unfilled Grey	-	
9	**Low Limit 1**		MVL1	*Warning Low limit 1*
		-	MVL1 <= MIN	*Invisible*
		Filled Yellow	MV < MVL1 and AL_BLK = 1	
		Unfilled Yellow	AL_BLK = 1	
		Filled Red	MV < MVL1	
		Unfilled Grey	-	
10	**Low Limit 2**		MVL2	*Alarm Low limit 2*
		-	MVL2 <= MIN	*Invisible*
		Filled Yellow	MV < MVL2 and AL_BLK = 1	
		Unfilled Yellow	AL_BLK = 1	
		Filled Red	MV < MVL2	
		Unfilled Grey	-	
11	**SP Value**		SP	*Object setpoint value*
		Cyan	-	

No	Description	Presentation	Condition	Remarks
12	**High SP Limit**		SETPH	*Upper warning limit setpoint*
		-	SETPH > MAX	*Invisible*
		Yellow	SP > SETPH	*Limitation line and mesh*
		Grey	-	
13	**Low SP Limit**		SETPL	*Lower warning limit setpoint*
		-	SETPL < MIN	*Invisible*
		Yellow	SP < SETPL	*Limitation line and mesh*
		Grey	-	
14	**Measured Value**			*The MV object value*
14.1	**MV Value**		MV	*Measured value*
		Green	-	
14.2	**MV Unit**		UNIT	*Measured unit*
		Green	-	
15	**Setpoint Value**			*The SP object value*
15.1	**SP Value**		SP	*Setpoint value*
		Cyan	-	
15.2	**SP Unit**		UNIT	*Setpoint unit*
		Cyan	-	
16	**Status Indication**			*Status - Square indication*
		Filled Green	IND1 = 1	*On*
		Unfilled Green	IND1 = 0 and IND2 =1	*Off*

4.12 Process Dialog for Manual Station MANSTN

4.12.1 MIN Dialog (No authority key)

4.12.1.1 Keyboard keys

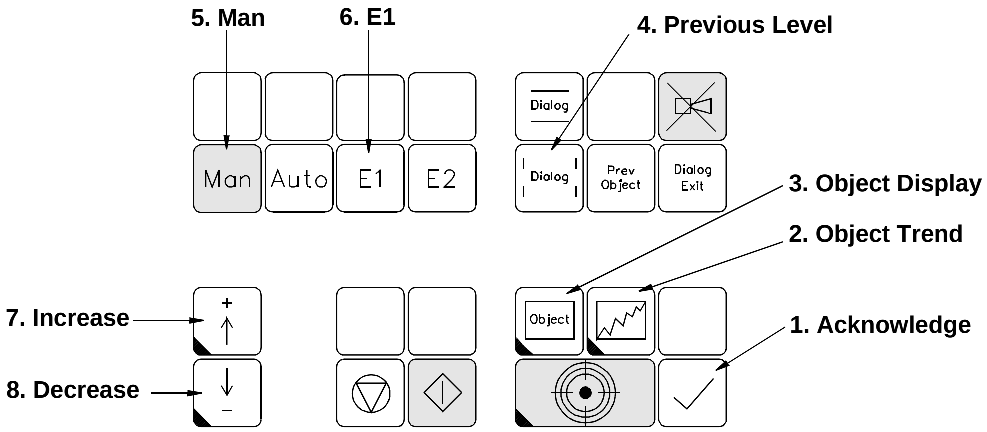


Figure 4-62. Keyboard keys

Key 1: Acknowledge	Perform: Acknowledge	AL_UNACK = 0
Key 2: Object Trend	Select: Object Trend	
Key 3: Object Display	Select: Object Display	
Key 4: Previous Level	Select Dynamic keys: Top Level	
Key 5: Man	Perform: Set to manual mode	MMI_MAN = 1 / MAN = 1
Key 6: E1	Perform: Set to external1 mode	MMI_E1 = 1 / E1 = 1
Key 7: Increase	Perform: Increase output value with 0.5 % if MAN = 1	MANOUT
Key 7: Shift + Increase	Perform: Increase output value with 5.0 % if MAN = 1	MANOUT
Key 8: Decrease	Perform: Decrease output value with 0.5 % if MAN = 1	MANOUT
Key 8: Shift + Decrease	Perform: Decrease output value with 5.0 % if MAN = 1	MANOUT

4.12.1.2 Dynamic keys, Top Level

D1	D2	D3	D4	D5
D6 OUT	D7	D8	D9	D10 Keyboard...

Figure 4-63. Dynamic keys

D6: OUT	Pressed: Dialog for changing Output value, value magenta	MANOUT
D10: Keyboard...	Select Dynamic keys: Keyboard	

4.12.1.3 Dynamic keys, Keyboard

D1 ↑ Increase	D2 Man	D3	D4 E1	D5
D6 ↓ Decrease	D7 Acknowledge	D8 Object Display	D9 Object Trend	D10

Figure 4-64. Dynamic keys

D1: Increase	Perform: Increase output value with 0.5 % if MAN = 1	MANOUT
D2: Man	Perform: Set to manual mode	MMI_MAN = 1 / MAN = 1
D4: E1	Perform: Set to external1 mode	MMI_E1 = 1 / E1 = 1
D6: Decrease	Perform: Decrease output value with 0.5 % if MAN = 1	MANOUT
D7: Acknowledge	Perform: Acknowledge	AL_UNACK = 0
D8: Object Display	Select: Object Display	
D9: Object Trend	Select: Object Trend	

4.12.2 MAX Dialog (Authority key)

4.12.2.1 Keyboard keys

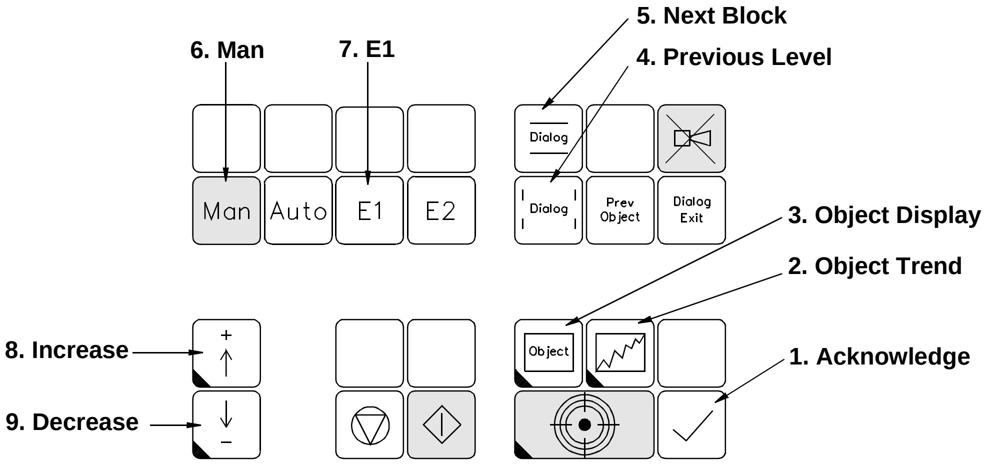


Figure 4-65. Keyboard keys

Key 1: Acknowledge	Perform: Acknowledge	AL_UNACK = 0
Key 2: Object Trend	Select: Object Trend	
Key 3: Object Display	Select: Object Display	
Key 4: Previous Level	Select Dynamic keys: Top Level	
Key 5: Next Block	Page between the dynamic key sets: Block, Limits and Keyboard	
Key 6: Man	Perform: Set to manual mode	MMI_MAN = 1 / MAN = 1
Key 7: E1	Perform: Set to external1 mode	MMI_E1 = 1 / E1 = 1
Key 8: Increase	Perform: Increase output value with 0.5 % if MAN = 1	MANOUT
Key 8: Shift + Increase	Perform: Increase output value with 5.0 % if MAN = 1	MANOUT
Key 9: Decrease	Perform: Decrease output value with 0.5 % if MAN = 1	MANOUT
Key 9: Shift + Decrease	Perform: Decrease output value with 5.0 % if MAN = 1	MANOUT

4.12.2.2 Dynamic keys, Top Level

D1	D2	D3	D4 Block...	D5 Limits...
D6 OUT	D7	D8	D9	D10 Keyboard...

Figure 4-66. Dynamic keys

D4: Block...	Select Dynamic keys: Block	
D5: Limits...	Select Dynamic keys: Limits	
D6: OUT	Pressed: Dialog for changing Output value, value magenta	MANOUT
D10: Keyboard...	Select Dynamic keys: Keyboard	

4.12.2.3 Dynamic keys, Keyboard

D1 ↑ Increase	D2 Man	D3	D4 E1	D5
D6 ↓ Decrease	D7 Acknowledge	D8 Object Display	D9 Object Trend	D10

Figure 4-67. Dynamic keys

D1: Increase	Perform: Increase output value with 0.5 % if MAN = 1	MANOUT
D2: Man	Perform: Set to manual mode	MMI_MAN = 1 / MAN = 1
D4: E1	Perform: Set to external1 mode	MMI_E1 = 1 / E1 = 1
D6: Decrease	Perform: Decrease output value with 0.5 % if MAN = 1	MANOUT
D7: Acknowledge	Perform: Acknowledge	AL_UNACK = 0
D8: Object Display	Select: Object Display	
D9: Object Trend	Select: Object Trend	

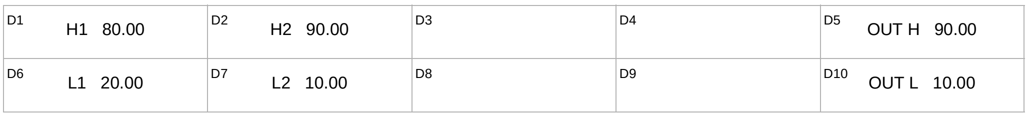
4.12.2.4 Dynamic keys, Block

D1 Block Alarm 1	D2 Block Printout 1	D3	D4 Block Alarm 2	D5 Block Printout 2
D6 Deblock Alarm 1	D7 Deblock Printout 1	D8	D9 Deblock Alarm 2	D10 Deblock Printout 2

Figure 4-68. Dynamic keys

D1: Block Alarm 1	Pressed: yellow text Released: white text	AL_F1_BLK = 1
D2: Block Printout 1	Pressed: yellow text Released: white text	PRINT_F1_BLK = 1
D4: Block Alarm 2	Pressed: yellow text Released: white text	AL_F2_BLK = 1
D5: Block Printout 2	Pressed: yellow text Released: white text	PRINT_F2_BLK = 1
D6: Deblock Alarm 1	Pressed: green text Released: white text	AL_F1_BLK = 0
D7: Deblock Printout 1	Pressed: green text Released: white text	PRINT_F1_BLK = 0
D9: Deblock Alarm 2	Pressed: green text Released: white text	AL_F2_BLK = 0
D10: Deblock Printout 2	Pressed: green text Released: white text	PRINT_F2_BLK = 0

4.12.2.5 Dynamic keys, Limits



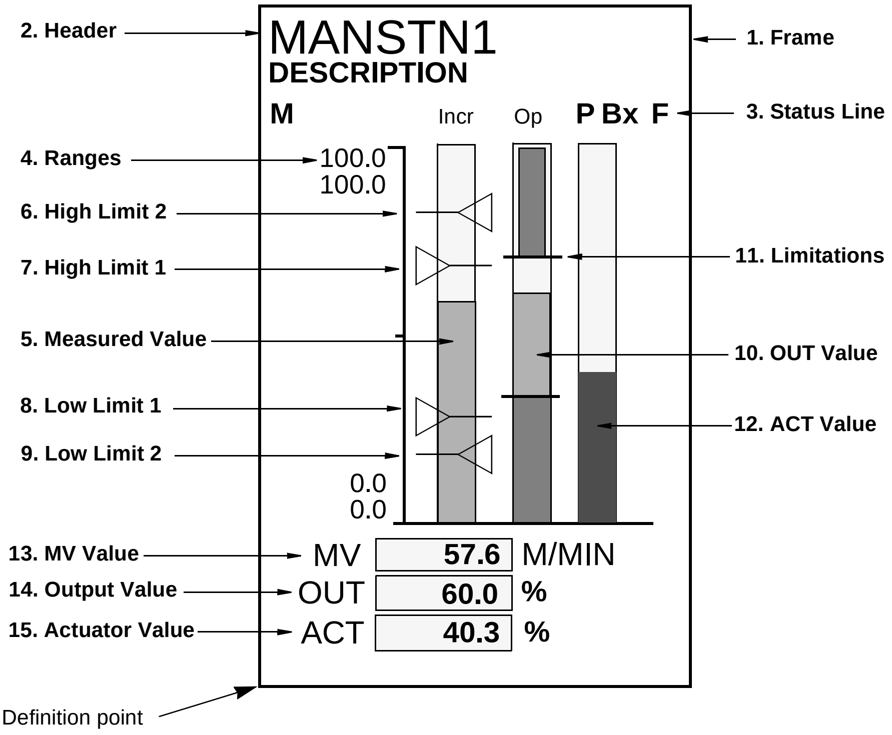
D1 H1 80.00	D2 H2 90.00	D3	D4	D5 OUT H 90.00
D6 L1 20.00	D7 L2 10.00	D8	D9	D10 OUT L 10.00

Figure 4-69. Dynamic keys

D1: H1	Pressed: Dialog for changing High Limit 1, value green	MVH1
D2: H2	Pressed: Dialog for changing High Limit 2, value green	MVH2
D5: OUT H	Pressed: Dialog for changing Output High, value magenta	OUTPH
D6: L1	Pressed: Dialog for changing Low Limit 1, value green	MVL1
D7: L2	Pressed: Dialog for changing Low Limit 2, value green	MVL2
D10: OUT L	Pressed: Dialog for changing Output Low, value magenta	OUTPL

4.12.3 MANGR01

Presentation:



Behavior:

No	Description	Presentation	Condition	Remarks
1	**SelectFrame**	White	SELECTED = 1	*Object select frame*
		Black	-	
2	**Header**		NAME and DESCR	*Object name and description*
		Red flashing	AL_UNACK = 1	*Unacknowledged alarm*
		Red	DISTURB = 1	*Alarm*
		Green	-	*Normal*
3	**Status Line**			*Status Line*
3.1	**Mode**	**M** Green	MAN =1	*Manual mode* ManModeColor
		E1 Green	E1 =1	*E1 mode*
3.2	**Direction**	**Incr** Green	MV_DIR = INCREASING	*Increase*
		Decr Green	MV_DIR = DECREASING	*Decrease*
3.3	**Actuator position**	**Op** Magenta	ACT_DIR = OPENING	*Actuator open*
		Cl Magenta	ACT_DIR = CLOSING	*Actuator closed*
3.4	**Printout Blocked**	**P** Yellow	PRINT_F1_BLK = 1 or PRINT_F2_BLK = 1	*Printout blocked*

No	Description	Presentation	Condition	Remarks
3.5	**Alarm Blocked**	**B** Yellow	AL_F1_BLK = 1 or AL_F2_BLK = 1	*Alarm blocked by operator*
		Bx Yellow	AL_F1_P_BLK = 1 or AL_F2_P_BLK = 1	*Alarm blocked by PC-program*
3.6	**Alarm Indication**	**F** Red	DISTURB = 1	*Alarm*
4	**Ranges**			*The actuator ranges are omitted since they always range from 0-100%.*
	MV Range Max	Green	MAX	*Range Max of the MV value*
	MV Range Min	Green	MIN	*Range Min of the MV value*
	Output Range Max	Magenta	PO_MAX	*Range Max of the output value*
	Output Range Min	Magenta	PO_MIN	*Range Min of the output value*
5	**Measured Value Bargraph**		MV	*Object value*
		Green	-	
6	**High Limit 2**		MVH2	*Alarm High limit 2*
	—◁	-	MVH2 >= MAX	*Invisible*
		Filled Yellow	MV>H2 = 1 and AL_F2_BLK = 1	
		Unfilled Yellow	AL_F2_BLK = 1	
		Filled Red flashing	MV>H2 = 1 and AU_MV>H2 = 1	
		Unfilled Red flashing	AU_MV>H2 = 1	
		Filled Red	MV>H2 = 1	
		Unfilled Grey	-	
7	**High Limit 1**		MVH1	*Warning High limit 1*
	▷—	-	MVH1 >= MAX	*Invisible*
		Filled Yellow	MV>H1 = 1 and AL_F1_BLK = 1	
		Unfilled Yellow	AL_F1_BLK = 1	
		Filled Red flashing	MV>H1 = 1 and AU_MV>H1 = 1	
		Unfilled Red flashing	AU_MV>H1 = 1	
		Filled Red	MV>H1 = 1	
		Unfilled Grey	-	

No	Description	Presentation	Condition	Remarks
8	**Low Limit 1**		MVL1	*Warning Low limit 1*
	▷—	-	MVL1 <= MIN	*Invisible*
		Filled Yellow	MV<L1 = 1 and AL_F1_BLK = 1	
		Unfilled Yellow	AL_F1_BLK = 1	
		Filled Red flashing	MV<L1 = 1 and AU_MV<L1 = 1	
		Unfilled Red flashing	AU_MV<L1 = 1	
		Filled Red	MV<L1 = 1	
		Unfilled Grey	-	
9	**Low Limit 2**		MVL2	*Alarm Low limit*
	—◁	-	MVL2 <= MIN	*Invisible*
		Filled Yellow	MV<L2 = 1 and AL_F2_BLK = 1	
		Unfilled Yellow	AL_F2_BLK = 1	
		Filled Red flashing	MV<L2 = 1 and AU_MV<L2 = 1	
		Unfilled Red flashing	AU_MV<L2 = 1	
		Filled Red	MV<L2 = 1	
		Unfilled Grey	-	
10	**OUT Value Bargraph**		POUT	*Object output value*
		Magenta	-	
11	**Output Limitations**			*Mesh and limitations lines*
11.1	**High Limitation**		OUTPH	*Upper warning limit output*
		-	OUTPH > PO_MAX	*Invisible*
		Yellow	OUT=HL = 1	
		Grey	-	
11.2	**Low Limitation**		OUTPL	*Lower warning limit output*
		-	OUTPL < PO_MIN	*Invisible*
		Yellow	OUT=LL = 1	
		Grey	-	
12	**Actuator Value Bargraph**		ACTPOS	*Actuator value*
		Blue	CTRL = ON-OFF	

No	Description	Presentation	Condition	Remarks
13	**Measured Value**			*The MV object value*
13.1	**MV**	**MV** Grey		*Text in front of the value*
13.2	**MV Value**	**? ? ?** Red	ERR =1	*Signal error*
			MV	*Measured value*
		Green	-	
13.3	**MV Unit**		UNIT	*Measured unit*
		Green	-	
14	**Output Value**			*The OUT object value*
14.1	**OUT**	**OUT** Grey		*Text in front of the value*
14.2	**OUT Value**		POUT	*Output value*
		Magenta	-	
14.3	**OUT Unit**		PO_UNIT	*Output unit*
		Magenta	-	
15	**Actuator Value**			*The ACT object value*
15.1	**ACT**	**ACT** Grey	CTRL = ON-OFF	*Text in front of the value*
15.2	**ACT Value**		ACTPOS	*Actuator value*
		Blue	CTRL = ON-OFF	
15.3	**ACT Unit**			*Actuator unit*
		% Blue	CTRL = ON-OFF	

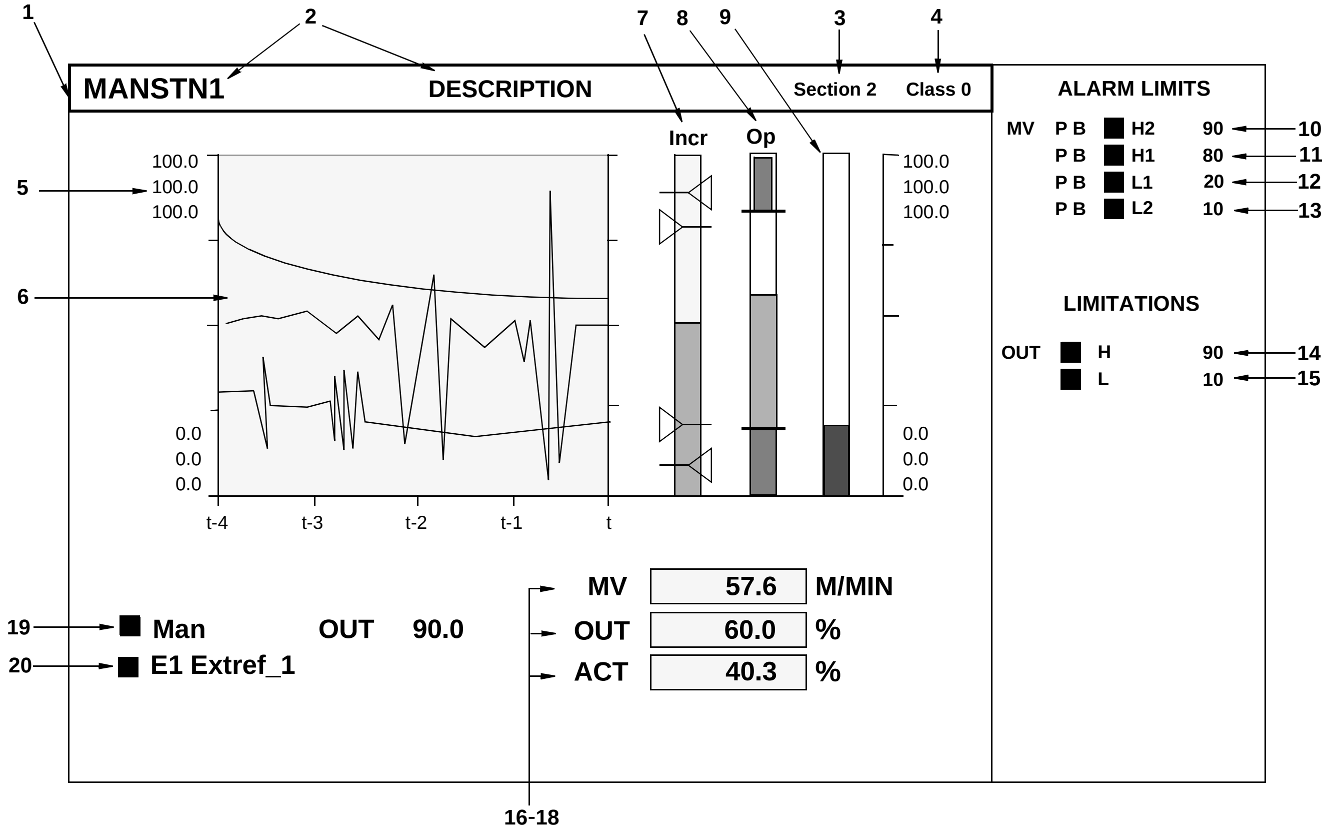
The conditions are in priority order. Underlined parameters are configurable.

Configuration:

Parameters	Affects	Options (bold is default)	Remarks
NameFont	2. Header Name	**FC50**, any font	
ManModeColor	3.1 Mode	**K5** (Green), any color	

4.12.4 MANOB01

Presentation:



Behavior:

No	Description	Presentation	Condition	Remarks
1	**SelectFrame**	White	SELECTED = 1	*Object select frame*
		Black	-	
2	**Header**		NAME and DESCR	*Object name and description*
		Red flashing	AL_UNACK = 1	*Unacknowledged alarm*
		Red	DISTURB = 1	*Alarm*
		Green	-	
3.1	**Section Text**	**Section** Grey		*Text in front of the value*
3.2	**Section Value**	Green	PROC_SEC	*Process section*
4.1	**Class Text**	**Class** Grey		*Text in front of the value*
4.2	**Class Value**	Green	CLASS	*Object class*

No	Description	Presentation	Condition	Remarks
5	**Ranges**			*The actuator ranges are omitted since they always range from 0-100%.*
	MV Range Max	Green	MAX	
	MV Range Min	Green	MIN	
	OUT Range Max	Magenta	PO_MAX	
	OUT Range Min	Magenta	PO_MIN	
	ACT Range Max	**100** Blue		
	ACT Range Min	**0** Blue		
6	**Measure Value Trim Curve**		MV	*MV value - Trim curve*
		Green	-	
	Output Value Trim Curve		POUT	*AUT value - Trim curve*
		Magenta	-	
	Output Value Trim Curve		ACTPOS	*ACT value - Trim curve*
		Blue	CTRL = ON-OFF	
7.1	**Direction**	**Incr** Green	MV_DIR = INCREASING	*Increase*
		Decr Green	MV_DIR = DECREASING	*Decrease*
7.2	**Measured Value Bargraph**		MV	*Object value*
		Green	-	
7.3	**High Limit 2**		MVH2	*Alarm High limit 2*
	—◁	-	MVH2 >= MAX	*Invisible*
		Filled Yellow	MV>H2 = 1 and AL_F2_BLK = 1	
		Unfilled Yellow	AL_F2_BLK = 1	
		Filled Red flashing	MV>H2 = 1 and AU_MV>H2 = 1	
		Unfilled Red flashing	AU_MV>H2 = 1	
		Filled Red	MV>H2 = 1	
		Unfilled Grey	-	
7.4	**High Limit 1**		MVH1	*Warning High limit 1*
	▷—	-	MVH1 >= MAX	*Invisible*
		Filled Yellow	MV>H1 = 1 and AL_F1_BLK = 1	
		Unfilled Yellow	AL_F1_BLK = 1	
		Filled Red flashing	MV>H1 = 1 and AU_MV>H1 = 1	
		Unfilled Red flashing	AU_MV>H1 = 1	
		Filled Red	MV>H1 = 1	
		Unfilled Grey	-	

No	Description	Presentation	Condition	Remarks
7.5	**Low Limit 1**		MVL1	*Warning Low limit 1*
	▷—	-	MVL1 <= MIN	*Invisible*
		Filled Yellow	MV<L1 = 1 and AL_F1_BLK = 1	
		Unfilled Yellow	AL_F1_BLK = 1	
		Filled Red flashing	MV<L1 = 1 and AU_MV<L1 = 1	
		Unfilled Red flashing	AU_MV<L1 = 1	
		Filled Red	MV<L1 = 1	
		Unfilled Grey	-	
7.6	**Low Limit 2**		MVL2	*Alarm Low limit*
	—◁	-	MVL2 <= MIN	*Invisible*
		Filled Yellow	MV<L2 = 1 and AL_F2_BLK = 1	
		Unfilled Yellow	AL_F2_BLK = 1	
		Filled Red flashing	MV<L2 = 1 and AU_MV<L2 = 1	
		Unfilled Red flashing	AU_MV<L2 = 1	
		Filled Red	MV<L2 = 1	
		Unfilled Grey	-	
8.1	**Open or Closed**	**Op** Green	ACT_DIR = OPENING	*Open or close information*
		Cl Green	ACT_DIR = CLOSING	
8.2	**OUT Value Bargraph**		POUT	*Object output value*
		Magenta	-	
8.3	**High Limitation**		OUTPH	*Upper warning limit output*
		-	OUTPH > PO_MAX	*Invisible*
		Yellow	OUT=HL = 1	*High Limitation*
		Grey	-	
8.4	**Low Limitation**		OUTPL	*Lower warning limit output*
		-	OUTPL < PO_MIN	*Invisible*
		Yellow	OUT=LL = 1	*Low Limitation*
		Grey	-	
9	**Actuator Value Bargraph**		ACTPOS	*Object actuator value*
		Blue	CTRL = ON-OFF	

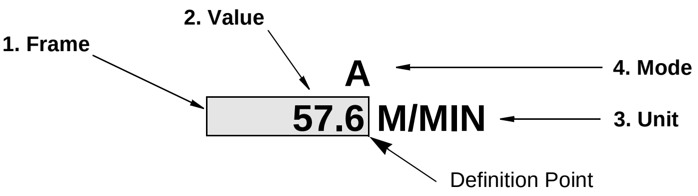
No	Description	Presentation	Condition	Remarks
10	**ALARM LIMITS for MV**			*Alarm limits for MV*
10.1	**Printout Blocked**	**P** Yellow	PRINT_F2_BLK = 1	*Printout Blocked.*
10.2	**Alarm Blocked**	**B** Yellow	AL_F2_BLK =1	*Alarm blocked by operator*
		Bx Yellow	AL_F2_P_BLK =1	*Alarm blocked by PC-program*
10.3	**Alarm Indication**	■ Red flashing	AU_MV>H2 =1	*Alarm High limit 2*
		■ Red	MV>H2 = 1	
10.4	**H2 Text**	**H2** Grey		*Text in front of the value*
10.5	**H2 Value**		MVH2	*High limit 2 value*
		Green	-	
11.1	**Printout Blocked**	**P** Yellow	PRINT_F1_BLK = 1	*Printout Blocked.*
11.2	**Alarm Blocked**	**B** Yellow	AL_F1_BLK =1	*Alarm blocked by operator*
		Bx Yellow	AL_F1_P_BLK =1	*Alarm blocked by PC-program*
11.3	**Alarm Indication**	■ Red flashing	AU_MV>H1 =1	*Warning High limit 1*
		■ Red	MV>H1 = 1	
11.4	**H1 Text**	**H1** Grey		*Text in front of the value*
11.5	**H1 Value**		MVH1	*High limit 1 value*
		Green	-	
12.1	**Printout Blocked**	**P** Yellow	PRINT_F1_BLK = 1	*Printout Blocked.*
12.2	**Alarm Blocked**	**B** Yellow	AL_F1_BLK =1	*Alarm blocked by operator*
		Bx Yellow	AL_F1_P_BLK =1	*Alarm blocked by PC-program*
12.3	**Alarm Indication**	■ Red flashing	AU_MV<L1 =1	*Warning Low limit 1*
		■ Red	MV<L1 = 1	
12.4	**L1 Text**	**L1** Grey		*Text in front of the value*
12.5	**L1 Value**		MVL1	*Low limit1 value*
		Green	-	
13.1	**Printout Blocked**	**P** Yellow	PRINT_F2_BLK = 1	*Printout Blocked.*
13.2	**Alarm Blocked**	**B** Yellow	AL_F2_BLK =1	*Alarm blocked by operator*
		Bx Yellow	AL_F2_P_BLK =1	*Alarm blocked by PC-program*
13.3	**Alarm Indication**	■ Red flashing	AU_MV<L2 =1	*Alarm Low limit 2*
		■ Red	MV<L2 = 1	
13.4	**L2 Text**	**L2** Grey		*Text in front of the value*
13.5	**L2 Value**		MVL2	*Low limit 2 value*
		Green	-	

No	Description	Presentation	Condition	Remarks
14	**LIMITATIONS for OUT**			*Limitations for OUT*
14.1	**OUT Text**	**OUT** Grey		*Text in front of the line*
14.2	**Warning Indication**	■ Yellow	OUT=HL = 1	*Warning Output High*
14.3	**H Text**	**H** Grey		*Text in front of the value*
14.4	**H Value**		OUTPH	*Output High value*
		Magenta	-	
15.1	**Warning Indication**	■ Yellow	OUT=LL = 1	*Warning Output Low*
15.2	**L Text**	**L** Grey		*Text in front of the value*
15.3	**L Value**		OUTPL	*Output Low value*
		Magenta	-	
16.1	**MV Text**	**MV** Grey		*Text in front of the value*
16.2	**MV Value**	**? ? ?** Red	ERR = 1	*Signal error*
			MV	*Measured value*
		Green	-	
16.3	**MV Unit**		UNIT	*Measured unit*
		Green	-	
17.1	**OUT Text**	**OUT** Grey		*Text in front of the value*
17.2	**OUT Value**		POUT	*Output value*
		Magenta	-	
17.3	**OUT Unit**		PO_UNIT	*Output unit*
		Magenta	-	
18	**Actuator Value**			*The ACT object value*
18.1	**ACT**	**ACT** Grey	CTRL = ON-OFF	*Text in front of the value*
18.2	**ACT Value**		ACTPOS	*Actuator value*
		Blue	CTRL = ON-OFF	
18.3	**ACT Unit**			*Actuator unit*
		% Blue	CTRL = ON-OFF	

No	Description	Presentation	Condition	Remarks
19.1	**Man indication**	■ Green	MAN = 1	*Manual mode*
19.2	**Man Text**	**Man**		*Text behind the indication*
		Green	MAN = 1	
		Grey	-	
19.3	**Man Out Text**	**OUT** Grey		*Text in front of the value*
19.4	**Man Out Value**		MANOUT	*Man Out value*
		Magenta	MAN = 1	*Manual mode*
		Grey	-	
20.1	**E1 indication**	■ Green	E1 = 1	*E1 mode*
20.2	**E1 Text**	**E1** Grey		*Text behind the indication*
		Green	E1 = 1	
		Grey	-	
20.3	**E1 Name**		E1NAME	*User text behind the text E1*
		Green	E1 = 1	
		Grey	-	

4.12.5 MANPD01

Presentation:



Behavior:

No	Description	Presentation	Condition	Remarks
1	**SelectFrame**	White	SELECTED = 1	*Selected*
		Dotted Yellow	AL_F1_BLK = 1 or AL_F2_BLK = 1	*Alarm blocked by operator*
		Black	-	FrameColor
2	**Measured Value**		MV	*Object value*
		? ? ? Red flashing	ERR = 1 and AL_UNACK = 1	*Unacknowledged signal error*
		Red flashing	AL_UNACK = 1	*Unacknowledged alarm*
		? ? ? Red	ERR =1	*Signal error*
		Red	DISTURB =1	*Alarm*
		Green	-	NormalColor
3	**Unit**		UnitVisible = onRequest	*Object unit*
		Green	UNIT	NormalColor
		-	UnitVisible = noSubscription	*Unit is invisible*
4	**Mode**		ModeVisible = true	*Object mode*
		M Green	MAN = 1	*Manual mode* ManModeColor
		E1Green	E1 = 1	*E1 mode* E1ModeColor
		-	ModeVisible = false	*Mode is invisible*

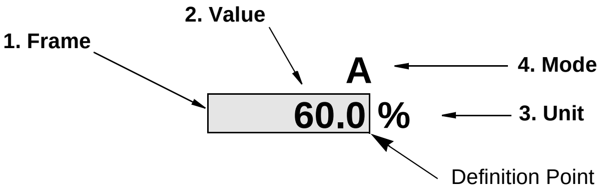
The conditions are in priority order. Underlined parameters are configurable.

Configuration:

Parameters	Affects	Options (bold is default)	Remarks
ModeVisible	4. Mode	**true**, false	
UnitVisible	3. Unit	**onRequest**, noSubscription	
NormalColor	2. Measured Value and 3. Unit	**K5** (Green), any color	
ManModeColor	4. Mode	**K5** (Green), any color	
E1ModeColor	4. Mode	**K5** (Green), any color	
SelectAreaColor	1. SelectArea	**K16** (Black), any color	*Background color and deletion color*
Font	2. Measured Value and 3. Unit	**FA40**, any font	
FrameColor	1. SelectFrame	**K16** (Black), any color	
FrameWidth	1. SelectFrame	**2**, (1..4)	
NumberOfChar	2. Measured Value	**7**	*Include "**.**" and "**-**"*
UseDisplayColor	4. Mode	**false**, true	*true if DisplayColor used*
DisplayColor	4. Mode	**N13** (Black), any color	*Bg for Mode if UseDisplayColor is true*

4.12.6 MANPD02

Presentation:



Behavior:

No	Description	Presentation	Condition	Remarks
1	**SelectFrame**	White	SELECTED = 1	*Selected*
		Dotted Yellow	AL_F1_BLK = 1 or AL_F2_BLK = 1	*Alarm blocked by operator*
		Black	-	FrameColor
2	**Output Value**		POUT	*Object ratio value*
		Red flashing	AL_UNACK = 1	*Unacknowledged alarm*
		Red	DISTURB = 1	*Alarm*
		Magenta	-	NormalColor
3	**Unit**		UnitVisible = onRequest	*Object unit*
		Magenta	PO_UNIT	NormalColor
		-	UnitVisible = noSubscription	*Unit is invisible*
4	**Mode**		ModeVisible = true	*Object mode*
		M Green	MAN = 1	*Manual mode* ManModeColor
		E1Green	E1 = 1	*E1 mode* E1ModeColor
		-	ModeVisible = false	*Mode is invisible*

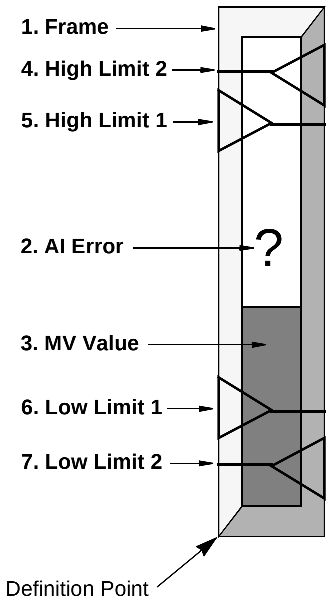
The conditions are in priority order. Underlined parameters are configurable.

Configuration:

Parameters	Affects	Options (bold is default)	Remarks
ModeVisible	4. Mode	**false**, true	
UnitVisible	3. Unit	**onRequest**, noSubscription	
NormalColor	2. Setpoint Value and 3. Unit	**K11**(Magenta), any color	
ManModeColor	4. Mode	**K5** (Green), any color	
E1ModeColor	4. Mode	**K5** (Green), any color	
SelectAreaColor	1. SelectArea	**K16** (Black), any color	*Background color and deletion color*
Font	2. Setpoint Value and 3. Unit	**FA40**, any font	
FrameColor	1. SelectFrame	**K16** (Black), any color	
FrameWidth	1. SelectFrame	**2**, (1..4)	
NumberOfChar	2. Setpoint Value	**7**	*Include “.” and “-”*
UseDisplayColor	4. Mode	**false**, true	*true if DisplayColor used*
DisplayColor	4. Mode	**N13** (Black), any color	*Bg for Mode if UseDisplayColor is true*

4.12.7 MANPD51

Presentation:



Behavior:

No	Description	Presentation	Condition	Remarks
1.1	**SelectFrame**	White	SELECTED = 1	*Object frame*
		Black	-	FrameColor
1.2	**TopLeftEdge**			*Three Dimensions effect*
		Grey		TopLeftColor
1.3	**BottomRightEdge**			*Three Dimensions effect*
		Grey		BottomRightColor
2	**AI Error**	**?** Red flashing	ERR = 1 and AL_UNACK = 1	*Unacknowledged signal error*
		? Red	ERR = 1	*Signal error*
3	**MV Value**		MV	*Object value*
		-	ERR = 1	*Invisible - I/O Error*
		Red flashing	AL_UNACK = 1	*Unacknowledged alarm*
		Red	DISTURB = 1	*Alarm*
		Green	-	NormalColor

No	Description	Presentation	Condition	Remarks
4	**High Limit 2**		MVH2	*Alarm High limit 2*
	—◁	-	MVH2 >= MAX	*Invisible*
		Filled Yellow	MV>H2 = 1 and AL_F2_BLK = 1	
		Unfilled Yellow	AL_F2_BLK = 1	
		Filled Red flashing	MV>H2 = 1 and AU_MV>H2 = 1	
		Unfilled Red flashing	AU_MV>H2 = 1	
		Filled Red	MV>H2 = 1	
		Unfilled Grey	-	LimitColor
5	**High Limit 1**		MVH1	*Warning High limit 1*
	▷—	-	MVH1 >= MAX	*Invisible*
		Filled Yellow	MV>H1 = 1 and AL_F1_BLK = 1	
		Unfilled Yellow	AL_F1_BLK = 1	
		Filled Red flashing	MV>H1 = 1 and AU_MV>H1 = 1	
		Unfilled Red flashing	AU_MV>H1 = 1	
		Filled Red	MV>H1 = 1	
		Unfilled Grey	-	LimitColor
6	**Low Limit 1**		MVL1	*Warning Low limit 1*
	▷—	-	MVL1 <= MIN	*Invisible*
		Filled Yellow	MV<L1 = 1 and AL_F1_BLK = 1	
		Unfilled Yellow	AL_F1_BLK = 1	
		Filled Red flashing	MV<L1 = 1 and AU_MV<L1 = 1	
		Unfilled Red flashing	AU_MV<L1 = 1	
		Filled Red	MV<L1 = 1	
		Unfilled Grey	-	LimitColor
7	**Low Limit 2**		MVL2	*Alarm Low limit*
	—◁	-	MVL2 <= MIN	*Invisible*
		Filled Yellow	MV<L2 = 1 and AL_F2_BLK = 1	
		Unfilled Yellow	AL_F2_BLK = 1	
		Filled Red flashing	MV<L2 = 1 and AU_MV<L2 = 1	
		Unfilled Red flashing	AU_MV<L2 = 1	
		Filled Red	MV<L2 = 1	
		Unfilled Grey	-	LimitColor

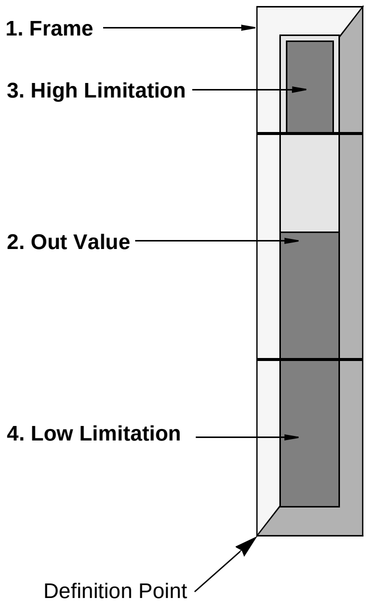
The conditions are in priority order. Underlined parameters are configurable.

Configuration:

Parameters	**Affects**	**Options (bold is default)**	**Remarks**
NormalColor	3. Measured Value	**K5** (Green), any color	
TopLeftColor	1.2 TopLeftEdge	**N13** (Grey), any color	*Regarding the choice of the color it will be three dimension effect*
BottomRightColor	1.3 BottomRightEdge	**N13** (Grey), any color	
FrameColor	1.1 SelectFrame	**K16** (Black), any color	
FrameWidth	1.1 SelectFrame	**2**, (1..4)	
BarBackColor	3. Measured Value	**K16** (Black), any color	*Background color of the bargraph*
LimitColor	4. High Limit 2, 5. High Limit 1, 6. Low Limit 1 and 7. Low Limit 2	**M16** (Grey), any color	*Color of the limit arrows*

4.12.8 MANPD52

Presentation:



Behavior:

No	Description	Presentation	Condition	Remarks
1.1	**SelectFrame**	White	SELECTED = 1	*Object frame*
		Black	-	FrameColor
1.2	**TopLeftEdge**			*Three Dimensions effect*
		Grey	-	TopLeftColor
1.3	**BottomRightEdge**			*Three Dimensions effect*
		Grey	-	BottomRightColor
2	**Out Value**		POUT	*Object output value*
		Red flashing	AL_UNACK = 1	*Unacknowledged alarm*
		Red	ERR = 1 or DISTURB =1	*Alarm*
		Magenta	-	NormalColor
3	**High Limitation**		OUTPH	*Upper warning limit output*
		-	OUTPH > PO_MAX	*Invisible*
		Yellow	OUT=HL = 1	
		Grey	-	LimitationColor

No	Description	Presentation	Condition	Remarks
4	**Low Limitation**		OUTPL	*Lower warning limit output*
		-	OUTPL < PO_MIN	*Invisible*
		Yellow	OUT=LL = 1	
		Grey	-	LimitationColor

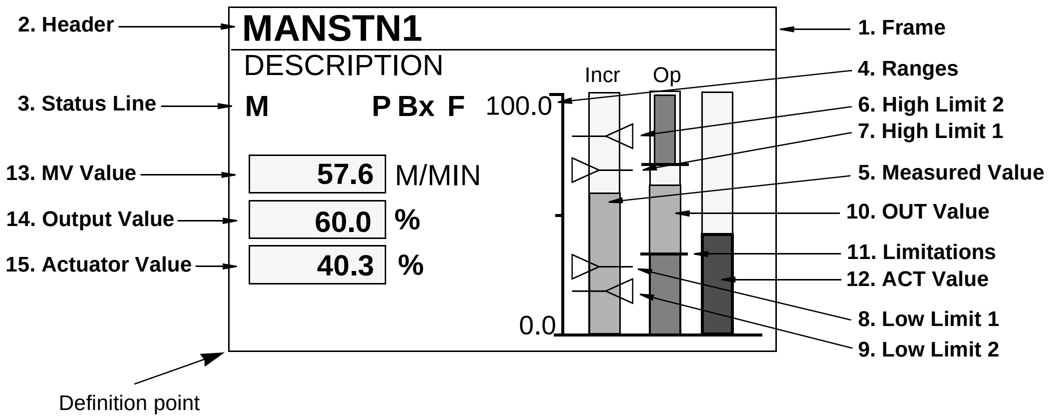
The conditions are in priority order. Underlined parameters are configurable**.**

Configuration:

Parameters	Affects	Options (bold is default)	Remarks
NormalColor	2. Out Value	**K11** (Magenta), any color	
TopLeftColor	1.2 TopLeftEdge	**N13** (Grey), any color	*Regarding the choice of the color it will be three dimension effect*
BottomRightColor	1.3 BottomRightEdge	**N13** (Grey), any color	
FrameColor	1.1 SelectFrame	**K16** (Black), any color	
FrameWidth	1.1 SelectFrame	**2**, (1..4)	
BarBackColor	2. Out Value	**K16** (Black), any color	*Background color of the bargraph*
LimitationColor	3. High Limitation and 4. Low Limitation	**M16** (Grey), any color	*Color of the limit arrows*

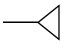
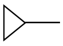
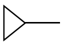
4.12.9 MANWI01

Presentation:



Behavior:

No	Description	Presentation	Condition	Remarks
1	**Select Frame**			*Object select frame*
		White	SELECTED = 1	*Only for overlap*
		Black	-	
2	**Header**		NAME and DESCR	*Object name and description*
		Red flashing	AL_UNACK = 1	*Unacknowledged alarm*
		Red	DISTURB = 1	*Alarm*
		Green	-	*Normal*
3	**Status Line**			*Status Line*
3.1	**Mode**	**M** Green	MAN =1	*Manual mode*
		E1 Green	E1 =1	*E1 mode*
3.2	**Direction**	**Incr** Green	MV_DIR = INCREASING	*Increase*
		Decr Green	MV_DIR = DECREASING	*Decrease*
3.3	**Actuator position**	**Op** Magenta	ACT_DIR = OPENING	*Actuator open*
		Cl Magenta	ACT_DIR = CLOSING	*Actuator closed*
3.4	**Printout Blocked**	**P** Yellow	PRINT_F1_BLK = 1 or PRINT_F2_BLK = 1	*Printout blocked*
3.5	**Alarm Blocked**	**B** Yellow	AL_F1_BLK = 1 or AL_F2_BLK = 1	*Alarm blocked by operator*
		Bx Yellow	AL_F1_P_BLK = 1 or AL_F2_P_BLK = 1	*Alarm blocked by PC-program*
3.6	**Alarm Indication**	**F** Red	DISTURB = 1	*Alarm*

No	Description	Presentation	Condition	Remarks
4	**Ranges**			
	MV Range Max	Green	MAX	*Range Max of the MV value*
	MV Range Min	Green	MIN	*Range Min of the MV value*
5	**Measured Value Bargraph**		MV	*Object value*
		Green	-	
6	**High Limit 2**		MVH2	*Alarm High limit 2*
		-	MVH2 >= MAX	*Invisible*
		Filled Yellow	MV>H2 = 1 and AL_F2_BLK = 1	
		Unfilled Yellow	AL_F2_BLK = 1	
		Filled Red flashing	MV>H2 = 1 and AU_MV>H2 = 1	
		Unfilled Red flashing	AU_MV>H2 = 1	
		Filled Red	MV>H2 = 1	
		Unfilled Grey	-	
7	**High Limit 1**		MVH1	*Warning High limit 1*
		-	MVH1 >= MAX	*Invisible*
		Filled Yellow	MV>H1 = 1 and AL_F1_BLK = 1	
		Unfilled Yellow	AL_F1_BLK = 1	
		Filled Red flashing	MV>H1 = 1 and AU_MV>H1 = 1	
		Unfilled Red flashing	AU_MV>H1 = 1	
		Filled Red	MV>H1 = 1	
		Unfilled Grey	-	
8	**Low Limit 1**		MVL1	*Warning Low limit 1*
		-	MVL1 <= MIN	*Invisible*
		Filled Yellow	MV<L1 = 1 and AL_F1_BLK = 1	
		Unfilled Yellow	AL_F1_BLK = 1	
		Filled Red flashing	MV<L1 = 1 and AU_MV<L1 = 1	
		Unfilled Red flashing	AU_MV<L1 = 1	
		Filled Red	MV<L1 = 1	
		Unfilled Grey	-	

No	Description	Presentation	Condition	Remarks
9	**Low Limit 2**		MVL2	*Alarm Low limit*
	—◁	-	MVL2 <= MIN	*Invisible*
		Filled Yellow	MV<L2 = 1 and AL_F2_BLK = 1	
		Unfilled Yellow	AL_F2_BLK = 1	
		Filled Red flashing	MV<L2 = 1 and AU_MV<L2 = 1	
		Unfilled Red flashing	AU_MV<L2 = 1	
		Filled Red	MV<L2 = 1	
		Unfilled Grey	-	
10	**OUT Value Bargraph**		POUT	*Object value*
		Magenta	-	
11	**Output Limitations**			*Mesh and limitations lines*
11.1	**High Limitation**		OUTPH	*Upper warning limit output*
		-	OUTPH > PO_MAX	*Invisible*
		Yellow	OUT=HL = 1	
		Grey	-	
11.2	**Low Limitation**		OUTPL	*Lower warning limit output*
		-	OUTPL < PO_MIN	*Invisible*
		Yellow	OUT=LL = 1	
		Grey	-	
12	**Actuator Value Bargraph**		ACTPOS	*Actuator value*
		Blue	CTRL = ON-OFF	
13	**Measured Value**			*The MV object value*
13.1	**MV**	**MV** Grey		*Text in front of the value*
13.2	**MV Value**	**? ? ?** Red	ERR =1	*Signal error*
			MV	*Measured value*
		Green	-	
13.3	**MV Unit**		UNIT	*Measured unit*
		Green	-	

No	Description	Presentation	Condition	Remarks
14	**Output Value**			*The OUT object value*
14.1	**OUT**	**OUT** Grey		*Text in front of the value*
14.2	**OUT Value**		POUT	*Output value*
		Magenta	-	
14.3	**OUT Unit**		PO_UNIT	*Output unit*
		Magenta	-	
15	**Actuator Value**			*The ACT object value*
15.1	**ACT**	**ACT** Grey	CTRL = ON-OFF	*Text in front of the value*
15.2	**ACT Value**		ACTPOS	*Actuator value*
		Blue	CTRL = ON-OFF	
15.3	**ACT Unit**			*Actuator unit*
		% Blue	CTRL = ON-OFF	

4.13 Process Dialog for Motor Control MOTCON

4.13.1 MIN Dialog (No authority key)

4.13.1.1 Keyboard keys

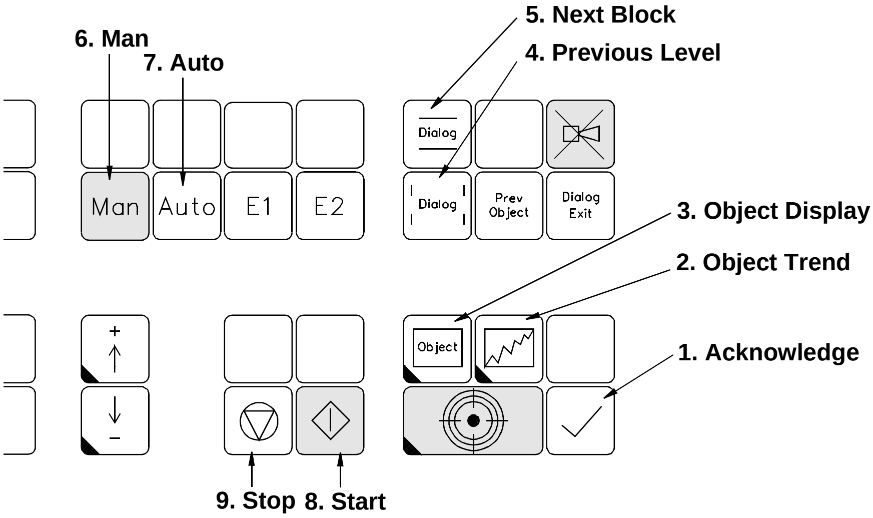


Figure 4-70. Keyboard keys

Key 1: Acknowledge	Perform: Acknowledge	AL_UNACK = 0
Key 2: Object Trend	Select: Object Trend	
Key 3: Object Display	Select: Object Display	
Key 4: Previous Level	Select Dynamic keys: Top Level	
Key 5: Next Block	Page between the dynamic key sets: Order and Keyboard	
Key 6: Man	Perform: Set to manual mode	MORD_05 = 1
Key 7: Auto	Perform: Set to automatic mode	MORD_04 = 1
Key 8: Start	Perform: Start motor	MORD_10 = 1
Key 9: Stop	Perform: Stop motor	MORD_11 = 1

4.13.1.2 Dynamic keys, Top Level

D1 Sequence	D2 Central	D3 Local	D4	D5
D6 ↓ Rev/Low	D7 ↑ Forw/High	D8	D9 Order...	D10 Keyboard...

Figure 4-71. Dynamic keys

D1: Sequence	Perform: Set control to Sequence Pressed: green text Released: white text	MORD_15 = 1
D2: Central	Perform: Set control to Central Pressed: green text Released: white text	MORD_03 = 1
D3: Local	Perform: Set control to Local Pressed: green text Released: white text	MORD_00 = 1
D6: Rev/Low	Perform: Set direction to Reverse/Low	MORD_09 = 1
D7: Forw/High	Perform: Set direction to Forward/High	MORD_08 = 1
D9: Order...	Select Dynamic keys: Order	
D10:Keyboard...	Select Dynamic keys: Keyboard	

4.13.1.3 Dynamic keys, Order

D1 Order 1	D2 Order 2	D3 Order 3	D4	D5
D6	D7	D8	D9	D10

Figure 4-72. Dynamic keys

D1: Order 1	Perform: Order 1	MORD_12 = 1
D2: Order 2	Perform: Order 2	MORD_13 = 1
D3: Order 3	Perform: Order 3	MORD_14 = 1

4.13.1.4 Dynamic keys, Keyboard

D1 ■ Start	D2 Man	D3 Auto	D4	D5
D6 □ Stop	D7 Acknowledge	D8 Object Display	D9 Object Trend	D10

Figure 4-73. Dynamic keys

D1: Start	Perform: Start motor	MORD_10 = 1
D2: Man	Perform: Set to manual mode	MORD_05 = 1
D3: Auto	Perform: Set to automatic mode	MORD_04 = 1
D6: Stop	Perform: Stop motor	MORD_11 = 1
D7: Acknowledge	Perform: Acknowledge	AL_UNACK = 0
D8: Object Display	Select: Object Display	
D9: Object Trend	Select: Object Trend	

4.13.2 MAX Dialog (Authority key)

4.13.2.1 Keyboard keys

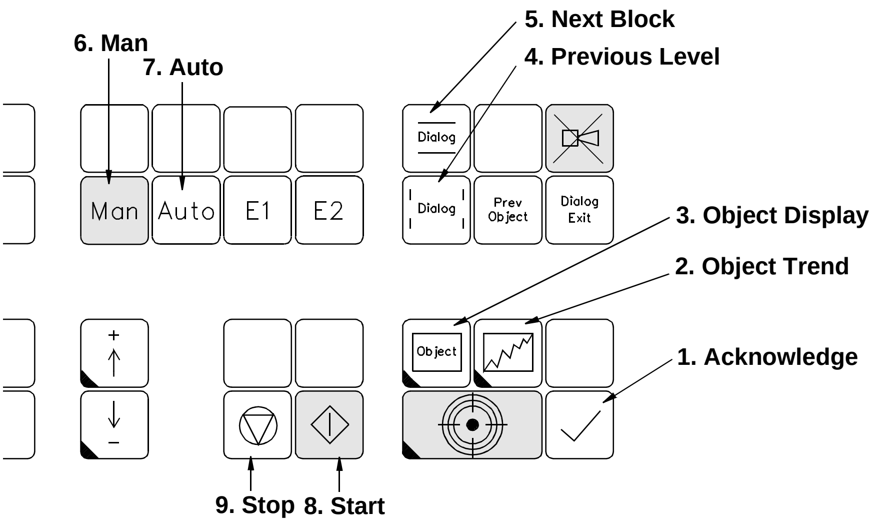
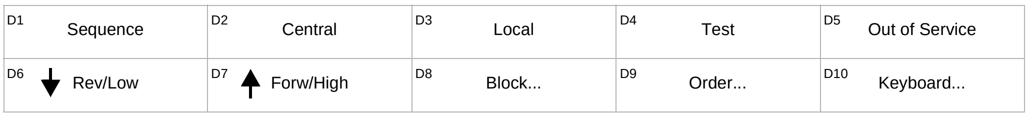


Figure 4-74. Keyboard keys

Key 1: Acknowledge	Perform: Acknowledge	AL_UNACK = 0
Key 2: Object Trend	Select: Object Trend	
Key 3: Object Display	Select: Object Display	
Key 4: Previous Level	Select Dynamic keys: Top Level	
Key 5: Next Block	Page between the dynamic key sets: Block, Order and Keyboard	
Key 6: Man	Perform: Set to manual mode	MORD_05 = 1
Key 7: Auto	Perform: Set to automatic mode	MORD_04 = 1
Key 8: Start	Perform: Start motor	MORD_10 = 1
Key 9: Stop	Perform: Stop motor	MORD_11 = 1

4.13.2.2 Dynamic keys, Top Level



D1 Sequence	D2 Central	D3 Local	D4 Test	D5 Out of Service
D6 ↓ Rev/Low	D7 ↑ Forw/High	D8 Block...	D9 Order...	D10 Keyboard...

Figure 4-75. Dynamic keys

D1: Sequence	Perform: Set control to Sequence Pressed: green text Released: white text	MORD_15 = 1
D2: Central	Perform: Set control to Central Pressed: green text Released: white text	MORD_03 = 1
D3: Local	Perform: Set control to Local Pressed: green text Released: white text	MORD_00 = 1
D4: Test	Perform: Set control to Test Pressed: green text Released: white text	MORD_01 = 1
D5: Out of Service	Perform: Set control to Out of Service Pressed: green text Released: white text	MORD_02 = 1
D6: Rev/Low	Perform: Set direction to Reverse/Low	MORD_09 = 1
D7: Forw/High	Perform: Set direction to Forward/High	MORD_08 = 1
D8: Block...	Select Dynamic keys: Block	
D9: Order...	Select Dynamic keys: Order	
D10:Keyboard...	Select Dynamic keys: Keyboard	

4.13.2.3 Dynamic keys, Keyboard

D1 ■ Start	D2 Man	D3 Auto	D4	D5
D6 □ Stop	D7 Acknowledge	D8 Object Display	D9 Object Trend	D10

Figure 4-76. Dynamic keys

D1: Start	Perform: Start motor	MORD_10 = 1
D2: Man	Perform: Set to manual mode	MORD_05 = 1
D3: Auto	Perform: Set to automatic mode	MORD_04 = 1
D6: Stop	Perform: Stop motor	MORD_11 = 1
D7: Acknowledge	Perform: Acknowledge	AL_UNACK = 0
D8: Object Display	Select: Object Display	
D9: Object Trend	Select: Object Trend	

4.13.2.4 Dynamic keys, Order

D1 Order 1	D2 Order 2	D3 Order 3	D4	D5
D6	D7	D8	D9	D10

Figure 4-77. Dynamic keys

D1: Order 1	Perform: Order 1	MORD_12 = 1
D2: Order 2	Perform: Order 2	MORD_13 = 1
D3: Order 3	Perform: Order 3	MORD_14 = 1

4.13.2.5 Dynamic keys, Block

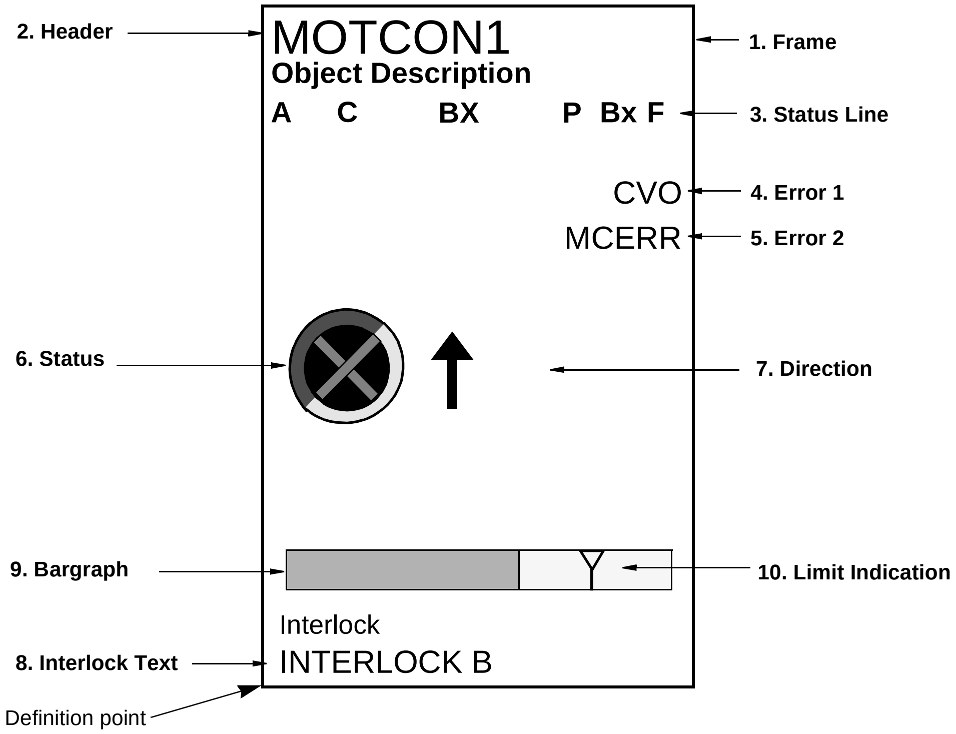
D1	D2 Block Alarm	D3 Block Printout	D4	D5 Override Interlock
D6	D7 Deblock Alarm	D8 Deblock Printout	D9	D10 Normal Interlock

Figure 4-78. Dynamic keys

D2: Block Alarm	Pressed: yellow text Released: white text	AL_BLK = 1
D3: Block Printout	Pressed: yellow text Released: white text	PR_BLK = 1
D5: Override Interlock	Pressed: yellow text Released: white text	MORD_06 = 1
D7: Deblock Alarm	Pressed: green text Released: white text	AL_BLK = 0
D8: Deblock Printout	Pressed: green text Released: white text	PR_BLK = 0
D10: Normal Interlock	Pressed: green text Released: white text	MORD_07 = 1

4.13.3 MOTGR01

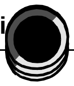
Presentation:



Behavior:

No	Description	Presentation	Condition	Remarks
1	**SelectFrame**	White	SELECTED = 1	*Object select frame*
		Black	-	
2	**Header**		NAME and DESCR	*Object name and description*
		Red flashing	AU_IND = 1	*Unacknowledged alarm*
		Red	IND1_DIST = 1	*Alarm*
		Green	-	*Normal*
3	**Status Line**			*Status Line*
3.1	**Mode**	**M** Green	IND2_05 = 0 and IND2_02 = 0 and IND2_03 = 0	*Manual mode* ManModeColor
		A Green flashing	IND2_05 = 1 and IND2_02 = 0 and IND2_03 = 0 and IND2_06 = 0 and IND1_12 = 0	*Indicates AutoStart* *Init Not Performed*
		A Green	IND2_05 = 1 and IND2_02 = 0 and IND2_03 = 0	*Auto mode*

No	Description	Presentation	Condition	Remarks
3.2	**Point Of Control**	**O** Yellow	IND2_03 = 1	*Out of Service*
		T Yellow	IND2_02 = 1	*Test*
		L Green	IND2_01 = 1	*Local*
		S Green	IND2_04 = 1	*Sequence*
		C Green	IND2_01 = 0 and IND2_02 = 0 and IND2_03 = 0 and IND2_04 = 0	*Central*
3.3	**Interlock Indication**	**X** Green	IND2_08 = 1 or IND2_09 = 1 or IND2_13 = 1 or (IND2_11 = 1 and IND1_12 = 0) or (IND2_00 = 0 and (IND2_12 = 1 or (IND2_10 = 1 and IND1_12 = 0)))	*Safety interlock or* *Operator interlock*
		BX Red	IND2_15 = 1	*Override Interlocks.* *Interlock IB1 or IB3 active*
		BX Yellow	IND2_00 = 1	*Override Interlock*
3.4	**Printout Blocked**	**P** Yellow	PR_BLK = 1	*Printout blocked*
3.5	**Alarm Blocked**	**B** Yellow	AL_BLK = 1	*Alarm blocked by operator*
		Bx Yellow	AL_P_BLK = 1	*Alarm blocked by PC-program*
3.6	**Fault Indication**	**F** Red	IND1_08 = 1	*Collective fault indication*
4	**Error 1**	**CVO** Red flashing	AU_IND1_00 = 1	*Control voltage unack. error*
		BIM Red flashing	AU_IND1_01 = 1	*Bimetal Relay unack. error*
		LSTOP Red flashing	AU_IND1_02 = 1	*Local stop unack. error*
		SMON Red flashing	AU_IND1_03 = 1	*Safety monitor unack. error*
		CVO Red	IND1_00 = 1	*Control voltage error*
		BIM Red	IND1_01 = 1	*Bimetal Relay*
		LSTOP Red	IND1_02 = 1	*Local stop*
		SMON Red	IND1_03 = 1	*Safety monitor*
5	**Error 2**	**MCERR** Red flashing	AU_IND1_04 = 1	*MotorCurrent unack error*
		MONL Red flashing	AU_IND1_05 = 1	*Monitor low unack error*
		MONH Red flashing	AU_IND1_06 = 1	*Monitor high unack error*
		MCERR Red	IND1_04 = 1	*MotorCurrent error*
		MONL Red	IND1_05 = 1	*Monitor low error*
		MONH Red	IND1_06 = 1	*Monitor high error*

No	Description	Presentati	Condition	Remarks
6	**MotorStatus**		IND2_07 = 0	*Not Ready for Start* *Error or interlocks prevent the start*
			IND2_14 = 1 and IND2_07 = 1	*A-Interlock*
			IND1_12 = 1 or IND1_15 = 1	*Run* *DirectionChange*
			IND2_06 = 1	*StartReadyAuto. The motor starts when the process conditions are satisfied*
			IND1_12 = 0	*Motor ready to start*
		Grey	IND2_03 = 1	*Out of service*
		Green flashing	IND1_15 = 1	*Change of Direction in progress*
		Green	-	
7	**Direction Indication**	Green ↑	IND1_13 = 1	*Forward/High*
		Green ↓	IND1_14 = 1	*Reverse/Low*
8.1	**Interlock Text**	**Interlock** Grey		*Interlock text*
8.2	**Act Pres Text**		ACT_PRES_TEXT	*Actual interlock text*
		Red	IND2_07 = 0	*Not ready for start*
		Yellow	IND2_07 = 1	*Ready for start*
9	**Bargraph**	Green	REAL_RES	*Motor current value*
		-	REAL_RES_HILIM <= 0.1	*Bargraph invisible*
10	**Limit Indication**	at 100%		*Limit Indication*
		Yellow	AL_BLK = 1	*Alarm blocked by operator*
		Red	IND1_10 = 1	*High motor current*
		Grey	-	
		-	REAL_RES_HILIM <= 0.1	*Limit Indication invisible*

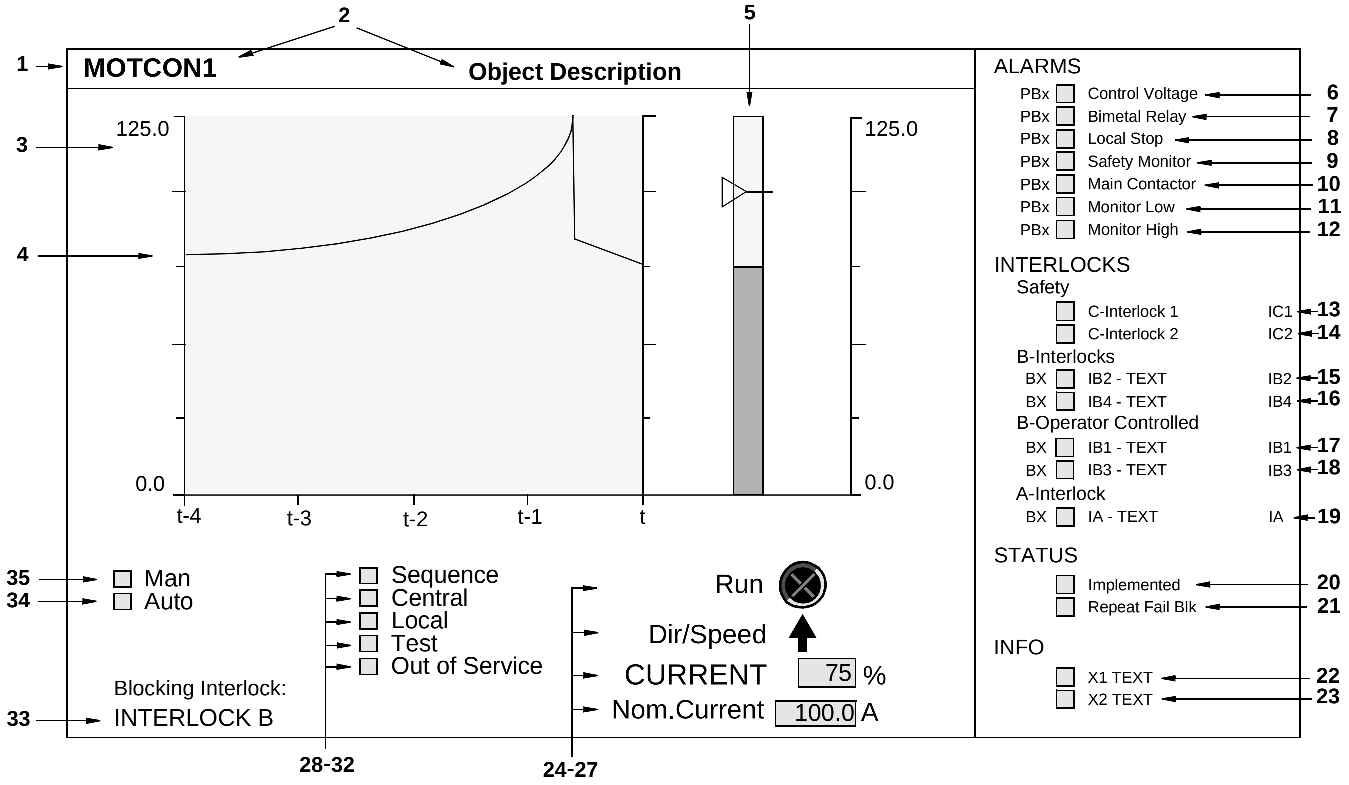
The conditions are in priority order. Underlined parameters are configurable.

Configuration:

Parameters	Affects	Options (bold is default)	Remarks
NameFont	2. Header Name	**FC50**, any font	
ManModeColor	3.1 Mode	**K5** (Green), any color	

4.13.4 MOTOB01

Presentation:



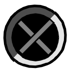
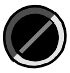
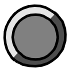
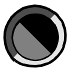
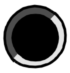
Behavior:

No	Description	Presentation	Condition	Remarks
1	**SelectFrame**	White	SELECTED = 1	*Object select frame*
		Black	-	
2	**Header**		NAME and DESCR	*Object name and description*
		Red flashing	AU_IND = 1	*Unacknowledged alarm*
		Red	IND1_DIST = 1	*Alarm*
		Green		*Normal*
3.1	**Range Max**	Green	REAL_RES_MAX	
		-	REAL_RES_HILIM <= 0.1	*Limit invisible*
3.2	**Range Min**	Green	REAL_RES_MIN	
		-	REAL_RES_HILIM <= 0.1	*Limit invisible*
4	**Trim Curve**	Green	REAL_RES	*Motor current*
		-	REAL_RES_HILIM <= 0.1	*Trim Curve invisible*

No	Description	Presentation	Condition	Remarks
5.1	**Bargraph**	Green	REAL_RES	*Motor current*
		-	REAL_RES_HILIM <= 0.1	*Bargraph invisible*
5.2	**Limit Indication**	at 100%		*Limit Indication*
		Yellow	AL_BLK = 1	*Alarm blocked by operator*
		Red	IND1_10 = 1	*High motor current*
		Grey		
		-	REAL_RES_HILIM <= 0.1	*Limit Indication invisible*
6	**ALARMS**			*Alarms*
6.1	**Printout Blocked**	**P** Yellow	PR_BLK = 1	*Printout blocked*
6.2	**Alarm Blocked**	**B** Yellow	AL_BLK = 1	*Alarm blocked by operator*
		Bx Yellow	AL_P_BLK = 1	*Alarm blocked by PC-program*
6.3	**Warning Indication**	■ Red flashing	AU_IND1_00 = 1	*Unacknowledged alarm*
		■ Red	IND1_00 = 1	*Alarm*
6.4	**Alarm 1 Text**	**Control Voltage**	TXT_BLK_00 = 0	*Monitoring of Control Voltage*
		Red	IND1_00 = 1 or AU_IND1_00 = 1	
		Grey	-	
7.1	**Printout Blocked**	**P** Yellow	PR_BLK = 1	*Printout blocked*
7.2	**Alarm Blocked**	**B** Yellow	AL_BLK = 1	*Alarm blocked by operator*
		Bx Yellow	AL_P_BLK = 1	*Alarm blocked by PC-program*
7.3	**Warning Indication**	■ Red flashing	AU_IND1_01 = 1	*Unacknowledged alarm*
		■ Red	IND1_01 = 1	*Alarm*
7.4	**Alarm 2 Text**	**Bimetal Relay**	TXT_BLK_01 = 0	*Monitoring of Bimetal Relay*
		Red	IND1_01 = 1 or AU_IND1_01 = 1	
		Grey	-	
8.1	**Printout Blocked**	**P** Yellow	PR_BLK = 1	*Printout blocked*
8.2	**Alarm Blocked**	**B** Yellow	AL_BLK = 1	*Alarm blocked by operator*
		Bx Yellow	AL_P_BLK = 1	*Alarm blocked by PC-program*
8.3	**Warning Indication**	■ Red flashing	AU_IND1_02 = 1	*Unacknowledged alarm*
		■ Red	IND1_02 = 1	*Alarm*
8.4	**Alarm 3 Text**	**Local Stop**	TXT_BLK_02 = 0	*Monitoring of Local Stop*
		Red	IND1_02 = 1 or AU_IND1_02 = 1	
		Grey	-	

No	Description	Presentation	Condition	Remarks
9.1	**Printout Blocked**	**P** Yellow	PR_BLK = 1	*Printout blocked*
9.2	**Alarm Blocked**	**B** Yellow	AL_BLK = 1	*Alarm blocked by operator*
		Bx Yellow	AL_P_BLK = 1	*Alarm blocked by PC-program*
9.3	**Warning Indication**	■ Red flashing	AU_IND1_03 = 1	*Unacknowledged alarm*
		■ Red	IND1_03 = 1	*Alarm*
9.4	**Alarm 4 Text**	**Safety Monitor**	TXT_BLK_03 = 0	*Monitoring of Safety Monitor*
		Red	IND1_03 = 1 or AU_IND1_03 = 1	
		Grey	-	
10.1	**Printout Blocked**	**P** Yellow	PR_BLK = 1	*Printout blocked*
10.2	**Alarm Blocked**	**B** Yellow	AL_BLK = 1	*Alarm blocked by operator*
		Bx Yellow	AL_P_BLK = 1	*Alarm blocked by PC-program*
10.3	**Warning Indication**	■ Red flashing	AU_IND1_04 = 1	*Unacknowledged alarm*
		■ Red	IND1_04 = 1	*Alarm*
10.4	**Alarm 5 Text**	**Main Contactor**	TXT_BLK_04 = 0	*Monitoring of Main Contactor*
		Red	IND1_04 = 1 or AU_IND1_04 = 1	
		Grey	-	
11.1	**Printout Blocked**	**P** Yellow	PR_BLK = 1	*Printout blocked*
11.2	**Alarm Blocked**	**B** Yellow	AL_BLK = 1	*Alarm blocked by operator*
		Bx Yellow	AL_P_BLK = 1	*Alarm blocked by PC-program*
11.3	**Warning Indication**	■ Red flashing	AU_IND1_05 = 1	*Unacknowledged alarm*
		■ Red	IND1_05 = 1	*Alarm*
11.4	**Alarm Text**	**Monitor Low**	TXT_BLK_05 = 0	*Monitoring of Monitor Low*
		Red	IND1_05 = 1 or AU_IND1_05 = 1	
		Grey	-	
12.1	**Printout Blocked**	**P** Yellow	PR_BLK = 1	*Printout blocked*
12.2	**Alarm Blocked**	**B** Yellow	AL_BLK = 1	*Alarm blocked by operator*
		Bx Yellow	AL_P_BLK = 1	*Alarm blocked by PC-program*
12.3	**Warning Indication**	■ Red flashing	AU_IND1_06 = 1	*Unacknowledged alarm*
		■ Red	IND1_06 = 1	*Alarm*
12.4	**Alarm Text**	**Monitor High**	TXT_BLK_06 = 0	*Monitoring of Monitor High*
		Red	IND1_06 = 1 or AU_IND1_06 = 1	
		Grey	-	

No	Description	Presentation	Condition	Remarks
13	**INTERLOCKS**			*Interlocks*
13.1	**IC1 Active**	■ Yellow	IND2_08 = 1	*Safety Interlock IC1 active*
13.2	**IC1 Text**	**C-Interlock 1** Grey		*Safety Interlock IC1*
14.1	**IC2 Active**	■ Yellow	IND2_09 = 1	*Safety Interlock IC2 active*
14.2	**IC2 Text**	**C-Interlock 2** Grey		*Safety Interlock IC2*
15.1	**IB2 Blocked**	**BX** Yellow	IND2_02 = 1	*Test mode. Interlock blocked*
15.2	**IB2 Active**	■ Yellow	IND2_13 = 1	*Interlock IB2 active*
15.3	**IB2 Text**	Green	IB2_TXT	*Interlock text IB2*
16.1	**IB4 Block Indication**	**BX** Yellow	IND2_02 = 1	*Test mode. Interlock blocked*
16.2	**IB4 Active**	■ Yellow	IND2_11 = 1	*Interlock IB4 active*
16.3	**IB4 Text**	Green	IB4_TXT	*Interlock IB4 text*
17.1	**IB1 Blocked**	**BX** Red	IND2_15 = 1 and (IND2_00 = 1 or IND2_02 = 1)	*Override Interlock and Interlock IB1 active*
		BX Yellow	IND2_00 = 1 or IND2_02 = 1	*Test mode. Interlock blocked*
17.2	**IB1 Active**	■ Yellow	IND2_12 = 1	*Interlock IB1 active*
17.3	**IB1 Text**	Green	IB1_TXT	*Interlock IB1 text*
18.1	**IB3 Blocked**	**BX** Red	IND2_15 = 1 and (IND2_00 = 1 or IND2_02 = 1)	*Override Interlock and Interlock IB3 active*
		BX Yellow	IND2_00 = 1 or IND2_02 = 1	*Test mode. Interlock blocked*
18.2	**IB3 Active**	■ Yellow	IND2_10 = 1	*Interlock IB3 active*
18.3	**IB3 Text**	Green	IB3_TXT	*Interlock IB3*
19.1	**IA Blocked**	**BX** Yellow	IND2_02 = 1	*Test mode. Interlock blocked*
19.2	**IA Active**	■ Yellow	IND2_14 = 1	*Interlock IA active*
19.3	**IA Text**	Green	IA_TXT	*Interlock IA text*
20	**STATUS**			*Status*
20.1	**Implemented Indication**	■ Green	ACT = 1	
20.2	**Implemented Text**	**Implemented** Grey		*Implemented*
21.1	**Repeat Fail Blocked Indication**	■ Yellow	REPEAT_BLK = 1	*The motor can be controlled*
21.2	**Repeat Fail Blocked Text**	**Repeat Fail Blk**		*Repeat Fail Blocked*
		Yellow	REPEAT_BLK = 1	
		Grey	-	

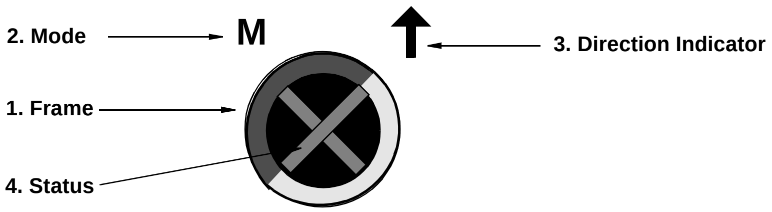
No	Description	Presentation	Condition	Remarks
22	**INFO**			*Info*
22.1	**X1 Indication**	■ Red flashing	AU_IND1_07 = 1	*Unack external alarm X1*
		■ Red	IND1_07 = 1	*External alarm*
22.2	**X1 Text**	Green	X1_TXT	
23.1	**X2 Indication**	■ Red flashing	AU_IND1_11 = 1	*Unack external alarm X2*
		■ Red	IND1_11 = 1	*External alarm*
23.2	**X2Text**	Green	X2_TXT	
24.1	**MotorStatus Text**	**Run** Grey		*Run*
24.2	**MotorStatus**		IND2_07 = 0	*Not Ready for Start* *Error or interlocks prevent the start*
			IND2_14 = 1 and IND2_07 = 1	*A-Interlock*
			IND1_12 = 1 or IND1_15 = 1	*Run* *DirectionChange*
			IND2_06 = 1	*StartReadyAuto. The motor starts when the process conditions are satisfied*
			IND1_12 = 0	*Motor ready to start*
		Grey	IND2_03 = 1	*Out of service*
		Green flashing	IND1_15 = 1	*Change of Direction in progress*
		Green	-	
25.1	**Dir/Speed Text**	**Dir/Speed** Grey		*Direction and speed*
25.2	**Direction Indication**	⬆	IND1_13 = 1	*Forwards/High*
		⬇	IND1_14 = 1	*Reverse/Low*
		Green	-	
26.1	**Current Text**	**CURRENT** Grey		*Current*
26.2	**Current Value**	Green	REAL_RES	*Motor current*
26.3	**Current Unit**	**%** Green	-	*% of norminal current*

No	Description	Presentation	Condition	Remarks
27.1	**Nom. Current Text**	**Nom. Current** Grey		*Nominal Current of motor*
27.2	**Nom. Current Value**	Green	REAL_RES_HILIM	
27.3	**Nom. Current Unit**	**A** Green		*Unit Ampere*
28.1	**Sequence Indication**	■ Green	IND2_04 = 1	*Sequence Controlled from groupstart*
28.2	**Sequence Text**	**Sequence**		
		Green	IND2_04 = 1	
		Grey	-	
29.1	**Central Indication**	■ Green	IND2_01 = 0 and IND2_02 = 0 and IND2_03 = 0 and IND2_04 = 0	*Central Controlled from operator’s place*
29.2	**Central Text**	**Central**		
		Green	IND2_01 = 0 and IND2_02 = 0 and IND2_03 = 0 and IND2_04 = 0	
		Grey	-	
30.1	**Local Indication**	■ Green	IND2_01 = 1	*Local* *Controlled from local panel*
30.2	**Local Text**	**Local**		
		Green	IND2_01 = 1	
		Grey	-	
31.1	**Test Indication**	■ Yellow	IND2_02 = 1	*Test* *Jog running from motor place*
31.2	**Test Text**	**Test**		
		Yellow	IND2_02 = 1	
		Grey	-	
32.1	**Out of Service Indication**	■ Yellow	IND2_03 = 1	*Out of service* *No control possible*
32.2	**Out of Service Text**	**Out of Service**		
		Yellow	IND2_03 = 1	
		Grey	-	

No	Description	Presentation	Condition	Remarks
33.1	**Blocking Interlock Text**	**Blocking Interlock:** Grey		*Blocking Interlock text*
33.2	**Actual Interlock Text**		ACT_PRES_TEXT	*Actual interlock text*
		Red	IND2_07 = 0	*Not ready for start*
		Yellow	IND2_07 = 1	*Ready for start*
34.1	**Auto Indication**	■ Green	IND2_05 = 1 and IND2_02 = 0 and IND2_03 = 0	*Auto mode. Process conditions control start/stop of motor*
34.2	**Auto Text**	**Auto**		
		Green	IND2_05 = 1 and IND2_02 = 0 and IND2_03 = 0	
		Grey	-	
35.1	**Man Indication**	■ Green	IND2_05 = 0 and IND2_02 = 0 and IND2_03 = 0	*Manual mode. Startorder affects the motor directly*
35.2	**Man Text**	**Man** Grey		
		Green	IND2_05 = 0 and IND2_02 = 0 and IND2_03 = 0	
		Grey	-	

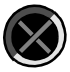
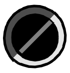
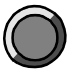
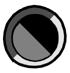
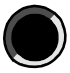
4.13.5 MOTPD01

Presentation:



Behavior:

No	Description	Presentation	Condition	Remarks
1	**SelectFrame**	White	SELECTED = 1	*Selected*
		Yellow	IND2_00 = 1	*Interlock override by operator*
		Dotted Yellow	AL_BLK = 1	*Alarm blocked by operator*
		Black	-	FrameColor
2	**Mode or**		ModeVisible = true	
	Control point	***** Yellow	IND2_02 = 1 and IND2_03 = 0	*Test*
		A Green	IND2_05 = 1 and IND2_02 = 0 and IND2_03 = 0	*Auto mode* AutoModeColor
		A Green flashing	IND2_05 = 1 and IND2_02 = 0 and IND2_03 = 0 and IND2_06 = 0 and IND1_12 = 0 and IND2_14 = 0 and IND2_07 = 1	*Indicates AutoStart* *Init Not Performed* NotReleasedAutoColor
		M Green	ManModeVisible = true and IND2_05 = 0 and IND2_02 = 0 and IND2_03 = 0	*Manual mode* ManModeColor
			ManModeVisible = false	
		S Green	IND2_04 = 1	*Sequence Control* SequenceColor
		L Green	IND2_01 = 1 and IND2_04 = 0	*Local Control* LocalColor
		C Green	IND2_01 = 0 and IND2_04 = 0	*Central Control* CentralColor
		-	ModeVisible = false	*Mode is invisible*

No	Description	Presentation	Condition	Remarks
3	**Direction Indication**		DirectionVisible = true	
		Green ↑	IND1_13 = 1	ForwHighColor *Forward/High*
		Green ↓	IND1_14 = 1	RewLowColor *Reverse/Low*
		-	DirectionVisible = false	*Direction is invisible*
4	**MotorStatus** shape		IND2_07 = 0	*Not Ready for Start* *Error or interlocks prevent the start*
			IND2_14 = 1 and IND2_07 = 1	*A-Interlock*
			IND1_12 = 1 or IND1_15 = 1	*Run* *DirectionChange*
			IND2_06 = 1	*StartReadyAuto. The motor starts when the process conditions are satisfied*
			IND1_12 = 0	*Motor ready to start*
	color	Grey	IND2_03 = 1	*Out of service*
		Red flashing	AU_IND = 1	*Unacknowledged alarm*
		Red	IND1_DIST = 1	*Error*
		Green flashing	IND1_15 = 1	*Change of Direction in progress* DirChangeColor
		Green	-	OnColor

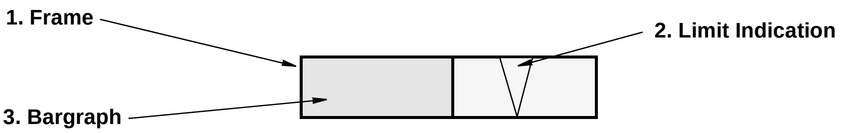
The conditions are in priority order. Underlined parameters are configurable.

Configuration:

Parameters	**Affects**	**Options (bold is default)**	**Remarks**
ModeIndVisible	2. Mode	**true**, false	
AutoModeColor	2. Mode	**K5** (Green), any color	
ManModeColor	2. Mode	**K5** (Green), any color	
ManModeVisible	2. Mode	**true**, false	*True = Man, False = S, L or C*
NotReleasedAutoColor	2. Mode	**N5** (Green Flash), any color	
SequenceColor	2. Control point	**K5** (Green), any color	
CentralColor	2. Control point	**K5** (Green), any color	
LocalColor	2. Control point	**K5** (Green), any color	
DirectionVisible	3. Direction	**false**, true	
FrameWidth	1. SelectFrame	**2**, (1..4)	
OffColor	4. MotorStatus	**K16** (Black), any color	
OnColor	4. MotorStatus	**K5** (Green), any color	
DirChangeColor	3. Direction	**N5** (Green Flash), any color	
Light3DColor	4. Three-Dim. indication	**L5** (Light Green), any color	
Medium3DColor	4. Three-Dim. indication	**K6** (Green), any color	
Dark3DColor	4. Three-Dim. indication	**M5** (Dark Green), any color	
RevLowColor	4. MotorStatus	**K5** (Green), any color	
ForwHighColor	4. MotorStatus	**K5** (Green), any color	
Font	2. Mode	**FA40**, any font	
UseDisplayColor	2. Mode	**false**, true	*True if DisplayColor used*
DisplayColor	2. Mode	**N13** (Black), any color	*Bg for Mode if UseDisplayColor is true*

4.13.6 MOTPD51

Presentation:



Behavior:

No	Description	Presentation	Condition	Remarks
1	**SelectFrame**	White	SELECTED = 1	*Selected*
		Black	-	FrameColor
2	**Limit Indication**	at 100%	LimitVisible = true	
	▽	Filled Yellow	AL_BLK = 1 and IND1_10 =1	*Alarm blocked*
		Unfilled Yellow	AL_BLK = 1	*Alarm blocked*
		Filled Red flashing	AU_IND = 1 and IND1_10 = 1	*Unacknowledged alarm*
		Unfilled Red flashing	AU_IND = 1	*Unacknowledged alarm*
		Filled Light Red	IND1_10 = 1	*High motor current*
		Grey	-	LimitColor
		-	LimitVisible = false	*Limit invisible*
3	**Bargraph**		REAL_RES	
		Red flashing	AU_IND = 1	*Unacknowledged alarm*
		Red	IND1_DIST = 1	*Error*
		Green	-	NormalColor

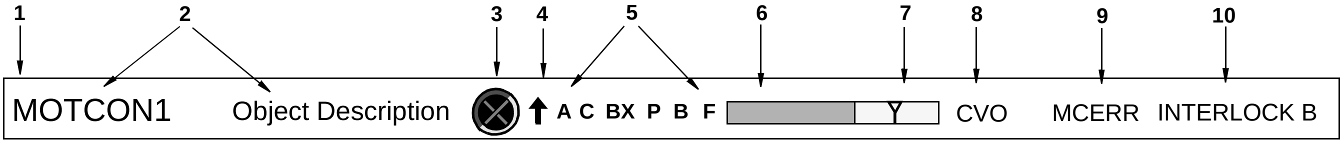
The conditions are in priority order. Underlined parameters are configurable.

Configuration:

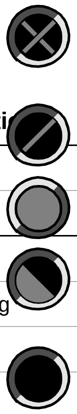
Parameters	Affects	Options (bold is default)	Remarks
LimitVisible	2. Limit Indication	**true**, false	
NormalColor	3. Bargraph	**K5** (Green), any color	
FrameColor	1. SelectFrame	**K16** (Black), any color	
FrameWidth	1. SelectFrame	**2**, (1..4)	
BarBackColor	3. Bargraph	**K16** (Black), any color	
LimitColor	2. Limit Indication	**M16** (Grey), any color	

4.13.7 MOTSG01

Presentation:



Behavior:



No	Description	Presentation	Condition	Remarks
1	**SelectFrame**	White	SELECTED = 1	*Selected*
		Black	-	FrameColor
2	**Header**		NAME and DESCR	*Object name and description*
		Red flashing	AU_IND = 1	*Unacknowledged alarm*
		Red	IND1_DIST = 1	*Alarm*
		Green	-	*Normal*
3	**MotorStatus**		IND2_07 = 0	*Not Ready for Start* *Error or interlocks prevent the start*
			IND2_14 = 1 and IND2_07 = 1	*A-Interlock*
			IND1_12 = 1 or IND1_15 = 1	*Run* *DirectionChange*
			IND2_06 = 1	*StartReadyAuto. The motor starts when the process conditions are satisfied*
			IND1_12 = 0	*Motor ready to start*
		Grey	IND2_03 = 1	*Out of service*
		Green flashing	IND1_15 = 1	*Change of Direction in progress*
		Green	-	
4	**Direction Indication**	Green 🡅	IND1_13 = 1	*Forward/High*
		Green 🡇	IND1_14 = 1	*Reverse/Low*

No	Description	Presentation	Condition	Remarks
5	**Status Indication**			*Status Indication*
5.1	**Mode**	**M** Green	IND2_05 = 0 and IND2_02 = 0 and IND2_03 = 0	*Manual mode* ManModeColor
		A Green flashing	IND2_05 = 1 and IND2_02 = 0 and IND2_03 = 0 and IND2_06 = 0 and IND1_12 = 0	*Indicates AutoStart Init Not Performed*
		A Green	IND2_05 = 1 and IND2_02 = 0 and IND2_03 = 0	*Auto mode* AutoModeColor
5.2	**Point Of Control**	**O** Yellow	IND2_03 = 1	*Out of Service*
		T Yellow	IND2_02 = 1	*Test*
		L Green	IND2_01 = 1	*Local* LocalColor
		S Green	IND2_04 = 1	*Sequence* SequenceColor
		C Green	IND2_01 = 0 and IND2_02 = 0 and IND2_03 = 0 and IND2_04 = 0	*Central* CentralColor
5.3	**Interlock Indication**	**X** Green	IND2_08 = 1 or IND2_09 = 1 or IND2_13 = 1 or (IND2_11 = 1 and IND1_12 = 0) or (IND2_00 = 0 and (IND2_12 = 1 or (IND2_10 = 1 and IND1_12 = 0)))	*Safety interlock or* *Operator interlock*
		BX Red	IND2_15 = 1	*Override Interlocks. Interlock IB1 or IB3 active*
		BX Yellow	IND2_00 = 1	*Override Interlock*
5.4	**Printout Blocked**	**P** Yellow	PR_BLK = 1	*Printout blocked*
5.5	**Alarm Blocked**	**B** Yellow	AL_BLK = 1	*Alarm blocked by operator*
		Bx Yellow	AL_P_BLK = 1	*Alarm blocked by PC-program*
5.6	**Fault Indication**	**F** Red	IND1_08 = 1	*Collective fault indication*
6	**Bargraph**	Green	REAL_RES	*Motor current value*
		-	REAL_RES_HILIM <= 0.1	*Bargraph invisible*
7	**Limit Indication**	at 100%		*Limit Indication*
		Yellow	AL_BLK = 1	*Alarm blocked by operator*
		Red	IND1_10 = 1	*High motor current*
		Grey	-	
		-	REAL_RES_HILIM <= 0.1	*Limit Indication invisible*

No	Description	Presentation	Condition	Remarks
8	**Error 1**	**CVO** Red flashing	AU_IND1_00 = 1	*Control voltage unack. error*
		BIM Red flashing	AU_IND1_01 = 1	*Bimetal Relay unack. error*
		LSTOP Red flashing	AU_IND1_02 = 1	*Local stop unack. error*
		SMON Red flashing	AU_IND1_03 = 1	*Safety monitor unack. error*
		CVO Red	IND1_00 = 1	*Control voltage error*
		BIM Red	IND1_01 = 1	*Bimetal Relay*
		LSTOP Red	IND1_02 = 1	*Local stop*
		SMON Red	IND1_03 = 1	*Safety monitor*
9	**Error 2**	**MCERR** Red flashing	AU_IND1_04 = 1	*MotorCurrent unack error*
		MONL Red flashing	AU_IND1_05 = 1	*Monitor low unack error*
		MONH Red flashing	AU_IND1_06 = 1	*Monitor high unack error*
		MCERR Red	IND1_04 = 1	*MotorCurrent error*
		MONL Red	IND1_05 = 1	*Monitor low error*
		MONH Red	IND1_06 = 1	*Monitor high error*
10	**Act Pres Text**		ACT_PRES_TEXT	*Actual interlock text*
		Red	IND2_07 = 0	*Not ready for start*
		Yellow	IND2_07 = 1	*Ready for start*

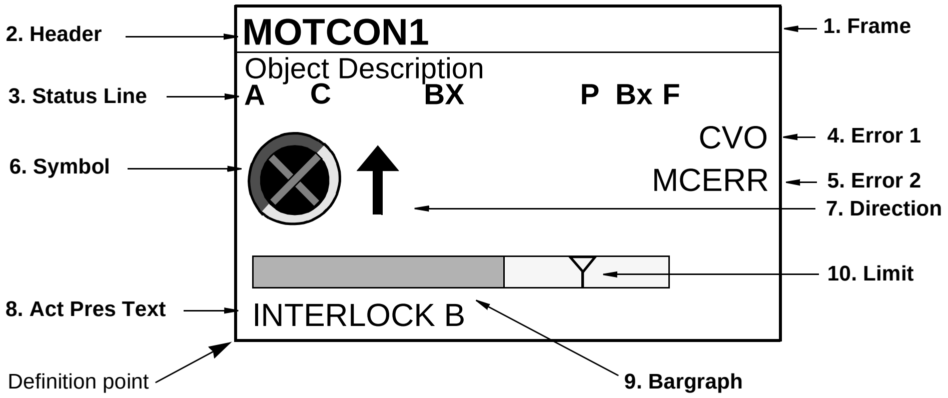
The conditions are in priority order. Underlined parameters are configurable.

Configuration:

Parameters	Affects	Options (bold is default)	Remarks
FrameColor	1. SelectFrame	**K16** (Black), any color	
NameFont	2. Header Name	**FC50**, any font	
ManModeColor	4.1 Mode	**K5** (Green), any color	
AutoModeColor	4.1 Mode	**K5** (Green), any color	
SequenceColor	4.2 Point Of Control	**K5** (Green), any color	
CentralColor	4.2 Point Of Control	**K5** (Green), any color	
LocalColor	4.2 Point Of Control	**K5** (Green), any color	

4.13.8 MOTWI01

Presentation:



Behavior:

No	Description	Presentation	Condition	Remarks
1	**Select Frame**			*Object select frame*
		White	SELECTED = 1	*Only for overlap*
		Black	-	
2	**Header**		NAME and DESCR	*Object name and description*
		Red flashing	AU_IND = 1	*Unacknowledged alarm*
		Red	IND1_DIST = 1	*Alarm*
		Green	-	*Normal*
3	**Status Line**			
3.1	**Mode**	**M** Green	IND2_05 = 0 and IND2_02 = 0 and IND2_03 = 0	*The object mode*
		A Green flashing	IND2_05 = 1 and IND2_02 = 0 and IND2_03 = 0 and IND2_06 = 0 and IND1_12 = 0	*Indicates AutoStart* *Init Not Performed*
		A Green	IND2_05 = 1 and IND2_02 = 0 and IND2_03 = 0	

No	Description	Presentation	Condition	Remarks
3.2	**Point Of Control**	**O** Yellow	IND2_03 = 1	*Out of Service*
		T Yellow	IND2_02 = 1	*Test*
		L Green	IND2_01 = 1	*Local*
		S Green	IND2_04 = 1	*Sequence*
		C Green	IND2_01 = 0 and IND2_02 = 0 and IND2_03 = 0 and IND2_04 = 0	*Central*
3.3	**Interlock Indication**	**X** Green	IND2_08 = 1 or IND2_09 = 1 or IND2_13 = 1 or (IND2_11 = 1 and IND1_12 = 0) or (IND2_00 = 0 and (IND2_12 = 1 or (IND2_10 = 1 and IND1_12 = 0)))	*Safety interlock or* *Operator interlock*
		BX Red	IND2_15 = 1	*Override Interlocks.* *Interlock IB1 or IB3 active*
		BX Yellow	IND2_00 = 1	*Override Interlock*
3.4	**Printout Blocked**	**P** Yellow	PR_BLK = 1	*Printout blocked*
3.5	**Alarm Blocked**	**B** Yellow	AL_BLK = 1	*Alarm blocked by operator*
		Bx Yellow	AL_P_BLK = 1	*Alarm blocked by PC-program*
3.6	**Fault Indication**	**F** Red	IND1_08 = 1	*Collective fault indication*
4	**Error 1**	**CVO** Red flashing	AU_IND1_00 = 1	*Control voltage unack. error*
		BIM Red flashing	AU_IND1_01 = 1	*Bimetal Relay unack. error*
		LSTOP Red flashing	AU_IND1_02 = 1	*Local stop unack. error*
		SMON Red flashing	AU_IND1_03 = 1	*Safety monitor unack. error*
		CVO Red	IND1_00 = 1	*Control voltage error*
		BIM Red	IND1_01 = 1	*Bimetal Relay*
		LSTOP Red	IND1_02 = 1	*Local stop*
		SMON Red	IND1_03 = 1	*Safety monitor*
5	**Error 2**	**MCERR** Red flashing	AU_IND1_04 = 1	*MotorCurrent unack error*
		MONL Red flashing	AU_IND1_05 = 1	*Monitor low unack error*
		MONH Red flashing	AU_IND1_06 = 1	*Monitor high unack error*
		MCERR Red	IND1_04 = 1	*MotorCurrent error*
		MONL Red	IND1_05 = 1	*Monitor low error*
		MONH Red	IND1_06 = 1	*Monitor high error*

No	Description	Presentati	Condition	Remarks
6	**MotorStatus**		IND2_07 = 0	*Not Ready for Start* *Error or interlocks prevent the start*
			IND2_14 = 1 and IND2_07 = 1	*A-Interlock*
			IND1_12 = 1 or IND1_15 = 1	*Run* *DirectionChange*
			IND2_06 = 1	*StartReadyAuto. The motor starts when the process conditions are satisfied*
			IND1_12 = 0	*Motor ready to start*
		Grey	IND2_03 = 1	*Out of service*
		Green flashing	IND1_15 = 1	*Change of Direction in progress*
		Green	-	
7	**Direction Indication**	Green ↑	IND1_13 = 1	*Forward/High*
		Green ↓	IND1_14 = 1	*Reverse/Low*
8	**Act Pres Text**		ACT_PRES_TEXT	*Actual interlock text*
		Red	IND2_07 = 0	*Not ready for start*
		Yellow	IND2_07 = 1	*Ready for start*
9	**Bargraph**	Green	REAL_RES	*Motor current value*
		-	REAL_RES_HILIM <= 0.1	*Bargraph invisible*
10	**Limit Indication** Y	at 100%		*Limit Indication*
		Yellow	AL_BLK = 1	*Alarm blocked by operator*
		Red	IND1_10 = 1	*High motor current*
		Grey	-	
		-	REAL_RES_HILIM <= 0.1	*Limit Indication invisible*

4.14 Process Dialog for Adaptive Process Controller PIDCONA

4.14.1 MIN Dialog (No authority key)

4.14.1.1 Keyboard keys

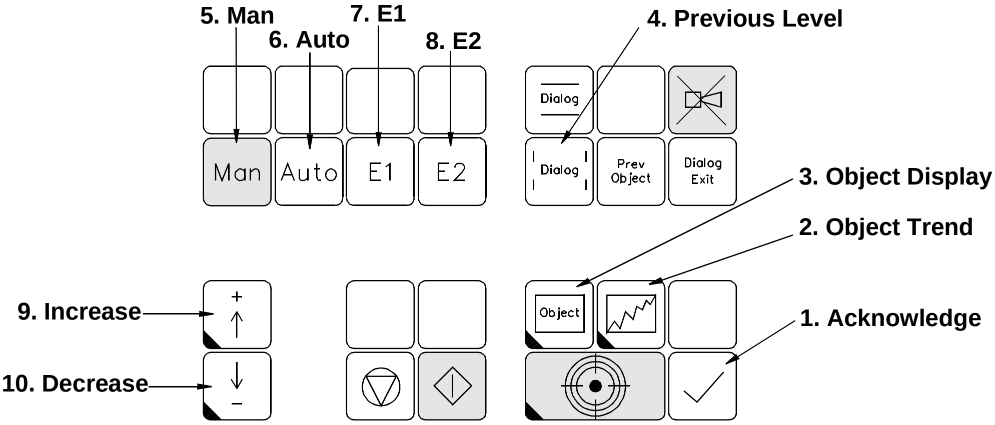


Figure 4-79. Keyboard keys

Key 1: Acknowledge	Perform: Acknowledge	AL_UNACK = 0
Key 2: Object Trend	Select: Object Trend	
Key 3: Object Display	Select: Object Display	
Key 4: Previous Level	Select Dynamic keys: Top Level	
Key 5: Man	Perform: Set to manual mode	MAN = 1
Key 6: Auto	Perform: Set to automatic mode	AUTO = 1
Key 7: E1	Perform: Set to external1 mode	E1 = 1
Key 8: E2	Perform: Set to external2 mode	E2 = 1
Key 9: Increase	Perform: Increase output value with 0.5 if MAN = 1 Increase setpoint value with 0.5	MANOUT SETP
Key 9: Shift + Increase	Perform: Increase output value with 5.0 if MAN = 1 Increase setpoint value with 5.0	MANOUT SETP
Key 10: Decrease	Perform: Decrease output value with 0.5 if MAN = 1 Decrease setpoint value with 0.5	MANOUT SETP
Key 10: Shift + Decrease	Perform: Decrease output value with 5.0 if MAN = 1 Decrease setpoint value with 5.0	MANOUT SETP

4.14.1.2 Dynamic keys, Top Level

D1 Man Forced	D2 E3	D3	D4	D5
D6 OUT	D7 SP	D8	D9	D10 Keyboard...

Figure 4-80. Dynamic keys

D1: Man Forced	Perform: Set to manual forced mode Pressed: green text Released: white text	MANFD = 1
D2: E3	Perform: Set to external 3 mode Pressed: green text Released: white text	E3 = 1
D6: OUT	Pressed: Dialog for changing Output value, value magenta	MANOUT
D7: SP	Pressed: Dialog for changing Setpoint value, value cyan	SETP
D10: Keyboard...	Select Dynamic keys: Keyboard	

4.14.1.3 Dynamic keys, Keyboard

D1 ↑ Increase	D2 Man	D3 Auto	D4 E1	D5 E2
D6 ↓ Decrease	D7 Acknowledge	D8 Object Display	D9 Object Trend	D10

Figure 4-81. Dynamic keys

D1: Increase	Perform: Increase output value with 0.5 if MAN = 1 Increase setpoint value with 0.5	MANOUT SETP
D2: Man	Perform: Set to manual mode	MAN = 1
D3: Auto	Perform: Set to automatic mode	AUTO = 1
D4: E1	Perform: Set to external1 mode	E1 = 1
D5: E2	Perform: Set to external2 mode	E2 = 1
D6: Decrease	Perform: Decrease output value with 0.5 if MAN = 1 Decrease setpoint value with 0.5	MANOUT SETP
D7: Acknowledge	Perform: Acknowledge	AL_UNACK = 0
D8: Object Display	Select: Object Display	
D9: Object Trend	Select: Object Trend	

4.14.2 MAX Dialog (Authority key)

4.14.2.1 Keyboard keys

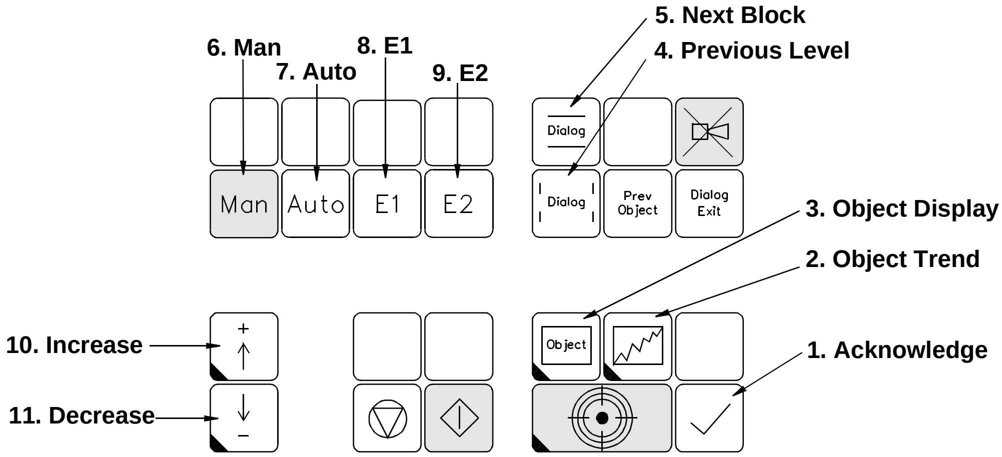


Figure 4-82. Keyboard keys

Key 1: Acknowledge	Perform: Acknowledge	AL_UNACK = 0
Key 2: Object Trend	Select: Object Trend	
Key 3: Object Display	Select: Object Display	
Key 4: Previous Level	Select Dynamic keys: Top Level or Extended Setup from Response Setup and Extended Setup	
Key 5: Next Block	Page between the dynamic key sets: Autotune, Block, Limits, Adaptation, Parameters and Keyboard or between Response Setup and Extended Setup	
Key 6: Man	Perform: Set to manual mode	MAN = 1
Key 7: Auto	Perform: Set to automatic mode	AUTO = 1
Key 8: E1	Perform: Set to external1 mode	E1 = 1
Key 9: E2	Perform: Set to external2 mode	E2 = 1
Key 10: Increase	Perform: Increase output value with 0.5 if MAN = 1 Increase setpoint value with 0.5	MANOUT SETP
Key 10: Shift + Increase	Perform: Increase output value with 5.0 if MAN = 1 Increase setpoint value with 5.0	MANOUT SETP
Key 11: Decrease	Perform: Decrease output value with 0.5 if MAN = 1 Decrease setpoint value with 0.5	MANOUT SETP

Key 11: Shift + Decrease	Perform: Decrease output value with 5.0 if MAN = 1	MANOUT
	Decrease setpoint value with 5.0	SETP

4.14.2.2 Dynamic keys, Top Level

D1 Man Forced	D2 E3	D3 Autotune...	D4 Block...	D5 Limits...
D6 OUT	D7 SP	D8 Adaptation...	D9 Parameters...	D10 Keyboard...

Figure 4-83. Dynamic keys

D1: Man Forced	Perform: Set to manual forced mode Pressed: green text Released: white text	MANFD = 1
D2: E3	Perform: Set to external 3 mode Pressed: green text Released: white text	E3 = 1
D3: Block...	Select Dynamic keys: Block	
D4: Autotune...	Se;ect Dynamic Keys: Autotune	
D4: Block...	Select Dynamic keys: Block	
D5: Limits...	Select Dynamic keys: Limits	
D6: OUT	Pressed: Dialog for changing Output value, value magenta	MANOUT
D7: SP	Pressed: Dialog for changing Setpoint value, value cyan	SETP
D8: Adaptation...	Select Dynamic Keys: Adaptation	
D9: Parameters...	Select Dynamic keys: Parameters	
D10: Keyboard...	Select Dynamic keys: Keyboard	

4.14.2.3 Dynamic keys, Keyboard

D1 ↑ Increase	D2 Man	D3 Auto	D4 E1	D5 E2
D6 ↓ Decrease	D7 Acknowledge	D8 Object Display	D9 Object Trend	D10

Figure 4-84. Dynamic keys

D1: Increase	Perform: Increase output value with 0.5 if MAN = 1 Increase setpoint value with 0.5	MANOUT SETP
D2: Man	Perform: Set to manual mode	MAN = 1
D3: Auto	Perform: Set to automatic mode	AUTO = 1
D4: E1	Perform: Set to external1 mode	E1 = 1
D5: E2	Perform: Set to external2 mode	E2 = 1
D6: Decrease	Perform: Decrease output value with 0.5 if MAN = 1 Decrease setpoint value with 0.5	MANOUT SETP
D7: Acknowledge	Perform: Acknowledge	AL_UNACK = 0
D8: Object Display	Select: Object Display	
D9: Object Trend	Select: Object Trend	

4.14.2.4 Dynamic keys, Autotune

D1 Start Tune	D2 Continue Tune	D3 Verify	D4 Accept &Save	D5 Stop &Restore
D6 Response Setup...	D7 Extended Setup...	D8	D9	D10 Retrieve Aborted Setting

Figure 4-85. Dynamic keys

D1: Start Tune	Perform: Start autotuning
D2: Continue Tune	Perform: Continue autotuning
D3: Verify	Perform: Try to verify setting
D4: Accept & Save	Perform: Accept autotuning and save present parameters
D5: Stop & Restore	Perform: Stop autotuning and restore present parameters
D6: Response Setup...	Select Dynamic keys: Response Setup
D7: Extended Setup...	Select Dynamic keys: Extended Setup
D10: Retrieve Aborted Setting	Perform: Retrieve Aborted Setting

4.14.2.5 Dynamic keys, Adaptation

D1 Adaptation Enable	D2	D3	D4 Save	D5 Restore
D6 Adaptation Off	D7	D8	D9	D10

Figure 4-86. Dynamic keys

D1: Adaptation Enable	Perform: Enable adaptation Pressed: green or yellow text Released: white text
D4: Save	Perform: Saving present parameters
D5: Restore	Perform: Restoring present parameters
D6: Adaptation Off	Perform: Disable adaptation Pressed: green text Released: white text

4.14.2.6 Dynamic keys, Block

D1 Block Alarm 1	D2 Block Printout 1	D3	D4 Block Alarm 2	D5 Block Printout 2
D6 Deblock Alarm 1	D7 Deblock Printout 1	D8	D9 Deblock Alarm 2	D10 Deblock Printout 2

Figure 4-87. Dynamic keys

D1: Block Alarm 1	Pressed: yellow text Released: white text	AL_F1_BLK = 1
D2: Block Printout 1	Pressed: yellow text Released: white text	PRINT_F1_BLK = 1
D4: Block Alarm 2	Pressed: yellow text Released: white text	AL_F2_BLK = 1
D5: Block Printout 2	Pressed: yellow text Released: white text	PRINT_F2_BLK = 1
D6: Deblock Alarm 1	Pressed: green text Released: white text	AL_F1_BLK = 0
D7: Deblock Printout 1	Pressed: green text Released: white text	PRINT_F1_BLK = 0
D9: Deblock Alarm 2	Pressed: green text Released: white text	ALARM_F2_BLK = 0
D10: Deblock Printout 2	Pressed: green text Released: white text	PRINT_F2_BLK = 0

4.14.2.7 Dynamic keys, Limits

D1 H1 80.00	D2 H2 90.00	D3 SP H 50.00	D4 DEV H1 2.20	D5 OUT H 100.00
D6 L1 20.00	D7 L2 10.00	D8 SP L 10.00	D9 DEV L1 -1.90	D10 OUT L 0.00

Figure 4-88. Dynamic keys

D1: H1	Pressed: Dialog for changing High Limit 1, value green	MVH1
D2: H2	Pressed: Dialog for changing High Limit 2, value green	MVH2
D3: SP H	Pressed: Dialog for changing Setpoint High, value cyan	SETPH
D4: DEV H1	Pressed: Dialog for changing Devation High, value cream	DEVH1
D5: OUT H	Pressed: Dialog for changing Output High, value magenta	OUTPH
D6: L1	Pressed: Dialog for changing Low Limit 1, value green	MVL1
D7: L2	Pressed: Dialog for changing Low Limit 2, value green	MVL2
D8: SP L	Pressed: Dialog for changing Setpoint Low, value cyan	SETPL
D9: DEV L1	Pressed: Dialog for changing Devation Low, value cream	DEVL1
D10: OUT L	Pressed: Dialog for changing Output Low, value magenta	OUTPL

4.14.2.8 Dynamic keys, Parameters

D1	D2	D3 Gain 1.32	D4 TI 6.01	D5 TD 4.01
D6	D7	D8 BETA 0.346	D9 TS 2.45	D10 DZ 0.98

Figure 4-89. Dynamic keys

D3: Gain	Pressed: Dialog for changing Gain value, value green	GAIN
D4: TI	Pressed: Dialog for changing TI value, value green	TI
D5: TD	Pressed: Dialog for changing TD value, value green	TD
D8: BETA	Pressed: Dialog for changing BETA value, value green	BETA
D9: TS	Pressed: Dialog for changing TS value, value green	TS
D10: DZ	Pressed: Dialog for changing DEADZ value, value green	DZ

4.14.2.9 Dynamic keys, Response Setup

D1 Extra Damped	D2 Damped	D3 Normal	D4 Fast	D5 Extra Fast
D6	D7	D8	D9	D10

Figure 4-90. Dynamic keys

D1: Extra Damped	Perform: Set response to extra damped Pressed green text	RESPTYPE = EXTRA DAMPED
D2: Damped	Perform: Set response to damped Pressed green text	RESPTYPE = DAMPED
D3: Normal	Perform: Set response to normal Pressed green text	RESPTYPE = NORMAL
D4: Fast	Perform: Set response to fast Pressed green text	RESPTYPE = FAST
D5: Extra Fast	Perform: Set response to extra fast Pressed green text	RESPTYPE = EXTRA FAST

4.14.2.10 Dynamic keys, Extended Setup

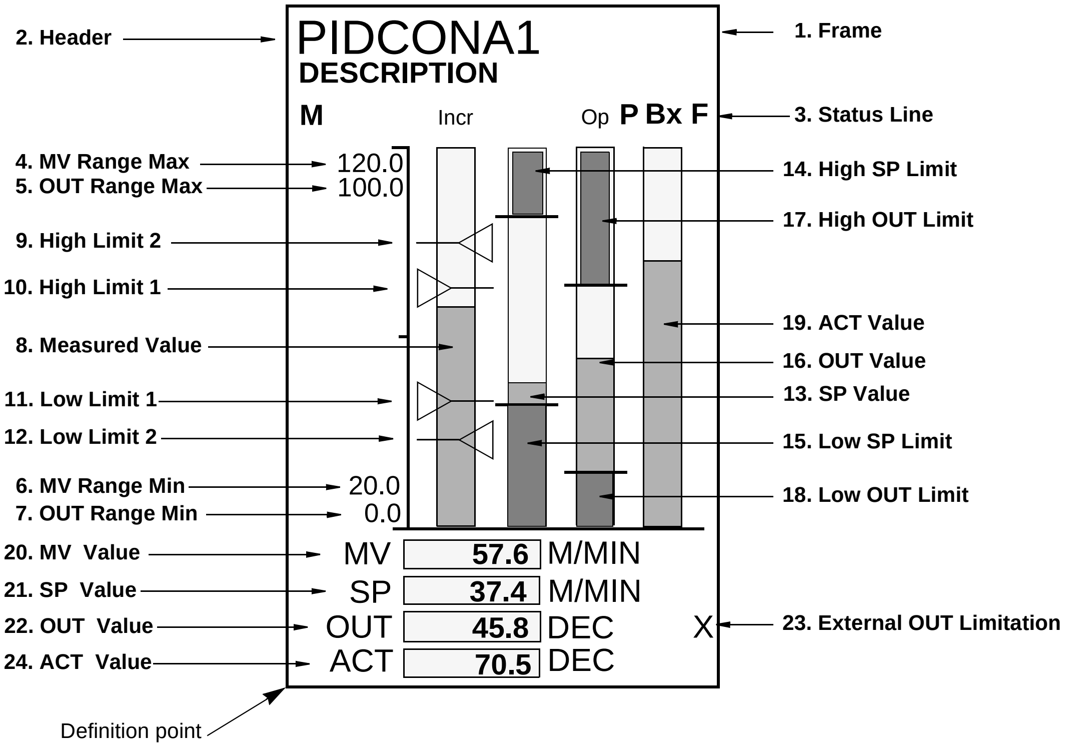
D1 Excitation Level OUT 6.00	D2 Excitation Level SP 4.50	D3	D4 Frequency Limit 0.398	D5 Frequency Unlimited
D6	D7	D8	D9	D10

Figure 4-91. Dynamic keys

D1: Excitation Level OUT	Pressed: Dialog for changing Excitation Level Output, value magenta	EXCLOUT
D2: Excitation Level SP	Pressed: Dialog for changing Excitation Level Setpoint, value cyan	EXCLSP
D4: Frequency Limit	Pressed: Dialog for changing Frequency Limit, value green	FREQLIM
D5: Frequency Unlimit	Pressed: green text Released: white text	

4.14.3 PIDAGR01

Presentation:



Behavior:

No	Description	Presentation	Condition	Remarks
1	**SelectFrame**	White	SELECTED = 1	*Selected*
		Black	-	
2	**Header**		NAME and DESCR	*Object name and description*
		Red flashing	AL_UNACK = 1	*Unacknowledged alarm*
		Red	DISTURB = 1	*Alarm*
		Green	-	*Normal*

No	Description	Presentation	Condition	Remarks
3	**Status Line**			*Status Line*
3.1	**Mode**	**BaLo** Green	LOCAL = 1	*Bal Local mode*
		Bal Green	BAL = 1	*Bal mode*
		MCp Green	CLAMPED = 1	*Man Clamped mode* ManModeColor
		MFd Green	MANFD = 1	*Man Forced mode* ManModeColor
		M AT Yellow	MAN = 1 and ATENBL = 1	*Man mode and Autotuning* ManModeColor
		M Yellow	MAN = 1	*Man mode* ManModeColor
		A AT Green	AUTO = 1 and ATENBL = 1	*Auto mode and Autotuning*
		A Ad Green	AUTO = 1 and ADAPON = 1	*Auto mode and Adaptation*
		A Green	AUTO = 1	*Auto mode*
		E1 AT Green	E1 = 1 and ATENBL = 1	*E1 mode and Autotuning*
		E1 Ad Green	E1 = 1 and ADAPON = 1	*E1 mode and Adaptation*
		E1 Green	E1 = 1	*E1 mode*
		E2 AT Green	E2 = 1 and ATENBL = 1	*E2 mode and Autotuning*
		E2 Ad Green	E2 = 1 and ADAPON = 1	*E2 mode and Adaptation*
		E2 Green	E2 = 1	*E2 mode*
		E3 AT Green	E3 = 1 and ATENBL = 1	*E3 mode and Autotuning*
		E3 Green	E3 = 1	*E3 mode*
3.2	**Direction**	**Incr** Green	REVACT = 1	*Increase. When measured value is increasing, it is counteracted with decreasing output.*
		Decr Green	REVACT = 0	*Decrease. When measured value is decreasing, output also decreasing.*
3.3	**Opening or Closing**	**Op** Magenta	ACT_DIR = OPENING	*Opening. When output in increasing the valve is opening.*
		Cl Magenta	ACT_DIR = CLOSING	*Closing. When output is increasing the valve is closing.*

No	Description	Presentation	Condition	Remarks
3.4	**Print Block**	**P** Yellow	PRINT_F1_BLK = 1 or PRINT_F2_BLK = 1	*Printout blocked*
3.5	**Alarm Block**	**B** Yellow	AL_F1_BLK = 1 or AL_F2_BLK = 1	*Alarm blocked by operator*
		Bx Yellow	AL_F1_P_BLK = 1 or AL_F2_P_BLK = 1	*Alarm blocked by PC-program*
3.6	**Alarm**	**F** Red	DISTURB = 1	*Alarm*
4	**MV Range Max**	Green	MAX	*Max Range of the MV and SP values*
5	**OUT Range Max**	Magenta	OUTMAX	*Max Range of the OUT and ACT values*
6	**MV Range Min**	Green	MIN	*Min Range of the MV and SP values*
7	**OUT Range Min**	Magenta	OUTMIN	*Min Range of the OUT and ACT values*
8	**Measured Value Bargraph**		MV	*Measured Value*
		Green	-	
9	**High Limit 2**		MVH2	*Alarm High limit 2*
	—◁	-	MVH2 >= MAX	*Invisible*
		Filled Yellow	MV>H2 = 1 and AL_F2_BLK = 1	
		Unfilled Yellow	AL_F2_BLK = 1	
		Filled Red flashing	MV>H2 = 1 and AU_MV>H2 = 1	
		Unfilled Red flashing	AU_MV>H2 = 1	
		Filled Red	MV>H2 = 1	
		Unfilled Grey	-	
10	**High Limit 1**		MVH1	*Warning High limit 1*
	▷—	-	MVH1 >= MAX	*Invisible*
		Filled Yellow	MV>H1 = 1 and AL_F1_BLK = 1	
		Unfilled Yellow	AL_F1_BLK = 1	
		Filled Red flashing	MV>H1 = 1 and AU_MV>H1 = 1	
		Unfilled Red flashing	AU_MV>H1 = 1	
		Filled Red	MV>H1 = 1	
		Unfilled Grey	-	

No	Description	Presentation	Condition	Remarks
11	**Low Limit 1**		MVL1	*Warning Low limit 1*
	▷—	-	MVL1 <= MIN	*Invisible*
		Filled Yellow	MV<L1 = 1 and AL_F1_BLK = 1	
		Unfilled Yellow	AL_F1_BLK = 1	
		Filled Red flashing	MV<L1 = 1 and AU_MV<L1 = 1	
		Unfilled Red flashing	AU_MV<L1 = 1	
		Filled Red	MV<L1 = 1	
		Unfilled Grey	-	
12	**Low Limit 2**		MVL2	*Alarm Low limit 2*
	—◁	-	MVL2 <= MIN	*Invisible*
		Filled Yellow	MV<L2 = 1 and AL_F2_BLK = 1	
		Unfilled Yellow	AL_F2_BLK = 1	
		Filled Red flashing	MV<L2 = 1 and AU_MV<L2 = 1	
		Unfilled Red flashing	AU_MV<L2 = 1	
		Filled Red	MV<L2 = 1	
		Unfilled Grey	-	
13	**SP Value**		SETP	*Setpoint value*
		Cyan	-	
14	**High SP Limit**		SETPH	*Upper setpoint limit*
		Yellow	SP=HL = 1	*Limitation line and mesh*
		Grey	-	
15	**Low SP Limit**		SETPL	*Lower setpoint limit*
		Yellow	SP=LL = 1	*Limitation line and mesh*
		Grey	-	
16	**OUT Value**		OUT	*Output value*
		Magenta	-	
17	**High OUT Limit**		OUTPH	*Upper output limit*
		-	OUTPH > OUTMAX or (EOHL > OUTMAX and EOLIM = 1)	*Invisible*
		Yellow	OUT=HL = 1	*Limitation line and mesh*
		Grey	-	
18	**Low OUT Limit**		OUTPL	*Lower output limit*
		-	OUTPL < OUTMIN or (EOLL < OUTMIN and EOLIM = 1)	*Invisible*
		Yellow	OUT=LL = 1	*Limitation line and mesh*
		Grey	-	

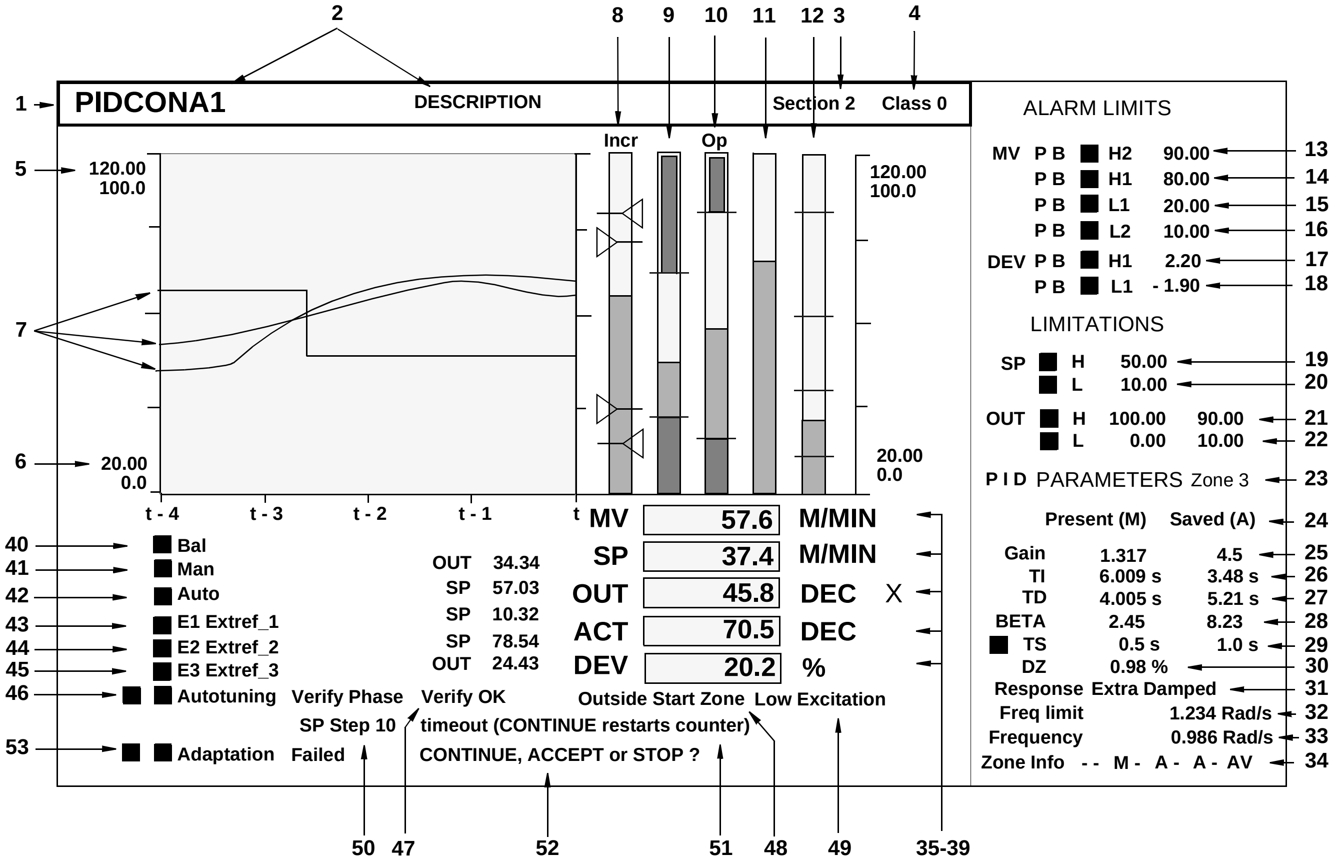
No	Description	Presentation	Condition	Remarks
19	**ACT Value**		ACTPOS	*Actuator value*
		Blue	SHOW_ACT = 1	
20	**Measured Value**			*The MV object value*
20.1	**MV**	**MV** Grey		*Text in front of the value*
20.2	**MV Value**	**? ? ?** Red	AI_ERR	*AI Error*
			MV	*Measured value*
		Green	-	
20.3	**MV Unit**		UNIT	*Measured unit*
		Green	-	
21	**Setpoint Value**			*The SP object value*
21.1	**SP**	**SP** Grey		*Text in front of the value*
21.2	**SP Value**		SETP	*Setpoint value*
		Cyan	-	
21.3	**SP Unit**		UNIT	*Setpoint unit*
		Cyan	-	
22	**Output Value**			*The OUT object value*
22.1	**OUT**	**OUT** Grey		*Text in front of the value*
22.2	**OUT Value**		OUT	*Output value*
		Magenta	-	
22.3	**OUT Unit**		OUTUNIT	*Output unit*
		Magenta	-	
23	**External OUT Limitation**	**X** Yellow	(OUT=HL = 1 or OUT=LL= 1) and EOLIM = 1	*OUT limited by external limitation*
24	**Actuator Value**			*The ACT object value*
24.1	**ACT**	**ACT** Grey	SHOW_ACT = 1	*Text in front of the value*
24.2	**ACT Value**		ACTPOS	*Actuator value*
		Blue	SHOW_ACT = 1	
24.3	**ACT Unit**		OUTUNIT	*Actuator unit*
		Blue	SHOW_ACT = 1	

The conditions are in priority order. Underlined parameters are configurable.

Parameters	Affects	Options (bold is default)	Remarks
NameFont	2. Header Name	**FC50,** any font	
ManModeColor	3.1 Mode	**K5** (Green), any color	

4.14.4 PIDAOB01

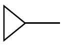
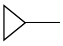
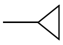
Presentation:



Behavior**:**

No	Description	Presentation	Condition	Remarks
1	**SelectFrame**	White	SELECTED = 1	*Object select frame*
		Black	-	
2	**Header**		NAME and DESCR	*Object name and description*
		Red flashing	AL_UNACK = 1	*Unacknowledged alarm*
		Red	DISTURB = 1	*Alarm*
		Green	-	*Normal*
3	**Section**	**Section** Grey		*Text in front of the value*
		Green	PROC_SEC	*Process section*
4	**Class**	**Class** Grey		*Text in front of the value*
		Green	CLASS	*Object class*

No	Description	Presentation	Condition	Remarks
5	**MV Range Max**		MAX	*Range Max of MV and SP values*
		Green	-	
	OUT Range Max		OUTMAX	*Range Max of OUT and ACT values*
		Magenta	-	
6	**MV Range Min**		MIN	*Range Min of MV and SP values*
		Green	-	
	OUT Range Min		OUTMIN	*Range Min of OUT and ACT values*
		Magenta	-	
7	**Measured Value Trim Curve**		MV	
		Green	-	
	Setpoint Value Trim Curve		SETP	
		Cyan	-	
	Output Value Trim Curve		OUT	
		Magenta	-	
8.1	**Direction**	**Incr** Green	REVACT = 1	*Increase. When measured value is increasing, it is counteracted with decreasing output.*
		Decr Green	REVACT = 0	*Decrease. When measured value is decreasing, output also decreasing.*
8.2	**Measured Value Bargraph**		MV	*Measured Value*
		Green		
8.3	**High Limit 2**		MVH2	*Alarm High limit 2*
	—◁	-	MVH2 >= MAX	*Invisible*
		Filled Yellow	MV>H2 = 1 and AL_F2_BLK = 1	
		Unfilled Yellow	AL_F2_BLK = 1	
		Filled Red flashing	MV>H2 = 1 and AU_MV>H2 = 1	
		Unfilled Red flashing	AU_MV>H2 = 1	
		Filled Red	MV>H2 = 1	
		Unfilled Grey	-	

No	Description	Presentation	Condition	Remarks
8.4	**High Limit 1**		MVH1	*Warning High limit 1*
		-	MVH1 >= MAX	*Invisible*
		Filled Yellow	MV>H1 = 1 and AL_F1_BLK = 1	
		Unfilled Yellow	AL_F1_BLK = 1	
		Filled Red flashing	MV>H1 = 1 and AU_MV>H1 = 1	
		Unfilled Red flashing	AU_MV>H1 = 1	
		Filled Red	MV>H1 = 1	
		Unfilled Grey	-	
8.5	**Low Limit 1**		MVL1	*Warning Low limit 1*
		-	MVL1 <= MIN	*Invisible*
		Filled Yellow	MV<L1 = 1 and AL_F1_BLK = 1	
		Unfilled Yellow	AL_F1_BLK = 1	
		Filled Red flashing	MV<L1 = 1 and AU_MV<L1 = 1	
		Unfilled Red flashing	AU_MV<L1 = 1	
		Filled Red	MV<L1 = 1	
		Unfilled Grey	-	
8.6	**Low Limit 2**		MVL2	*Alarm Low limit 2*
		-	MVL2 <= MIN	*Invisible*
		Filled Yellow	MV<L2 = 1 and AL_F2_BLK = 1	
		Unfilled Yellow	AL_F2_BLK = 1	
		Filled Red flashing	MV<L2 = 1 and AU_MV<L2 = 1	
		Unfilled Red flashing	AU_MV<L2 = 1	
		Filled Red	MV<L2 = 1	
		Unfilled Grey	-	
9.1	**SP Value Bargraph**		SETP	*Setpoint Value*
		Cyan	-	
9.2	**High SP Limit**		SETPH	*Upper limit setpoint*
		Yellow	SP=HL = 1	*Limitation line and mesh*
		Grey	-	
9.3	**Low SP Limit**		SETPL	*Lower setpoint limit*
		Yellow	SP=LL = 1	*Limitation line and mesh*
		Grey	-	

No	Description	Presentation	Condition	Remarks
10.1	**Opening or Closing**	**Op** Magenta	ACT_DIR = OPENING	*Opening. When output is increasing the valve is opening.*
		Cl Magenta	ACT_DIR = CLOSING	*Closing. When output is increasing the valve is closing.*
10.2	**OUT Value Bargraph**		OUT	*Output value*
		Magenta	-	
10.3	**HIgh OUT Limit**		OUTPH	*Upper limit output*
		-	OUTPH > OUTMAX or (EOHL > OUTMAX and EOLIM = 1)	*Invisible*
		Yellow	OUT=HL = 1	*Limitation line and mesh*
		Grey	-	
10.4	**Low OUT Limit**		OUTPL	*Lower limit output*
		-	OUTPL < OUTMIN or (EOLL < OUTMIN and EOLIM = 1)	*Invisible*
		Yellow	OUT=LL = 1	*Limitation line and mesh*
		Grey	-	
11	**ACT Value Bargraph**		ACTPOS	*Actuator position.*
		Blue	SHOW_ACT = 1	
12.1	**Gain Scheduling Bargraph**		SCHEDIN	*Gain scheduling value in.*
		Brown		*Gain scheduling enabled.*
12.2	**Zone limit between zone 4 and 5**		ZLIM45	
		Grey		*Gain scheduling enabled.*
12.3	**Zone limit between zone 3 and 4**		ZLIM34	
		Grey		*Gain scheduling enabled.*
12.4	**Zone limit between zone 2 and 3**		ZLIM23	
		Grey		*Gain scheduling enabled.*
12.5	**Zone limit between zone 1 and 2**		ZLIM12	
		Grey		*Gain scheduling enabled.*

No	Description	Presentation	Condition	Remarks
13	**ALARM LIMITS**			*Alarm limits*
13.1	**MV Text**	**MV** Grey		*Text in front of the line*
13.2	**Printout blocked**	**P** Yellow	PRINT_F2_BLK = 1	*Printout blocked.*
13.3	**Alarm blocked**	**B** Yellow	AL_F2_BLK = 1	*Alarm blocked by operator.*
		Bx Yellow	AL_F2_P_BLK = 1	*Alarm blocked by PC-program*
13.4	**Alarm Indication**	■ Red flashing	AU_MV>H2 = 1	*Unacknowledged alarm.*
		■ Red	MV>H2 = 1	*Alarm.*
13.5	**H2 Text**	**H2** Grey		*Text in front of the value*
13.6	**H2 Value**	Green	MVH2	*High limit 2 value*
14.1	**Printout blocked**	**P** Yellow	PRINT_F1_BLK = 1	*Printout blocked*
14.2	**Alarm blocked**	**B** Yellow	AL_F1_BLK = 1	*Alarm blocked by operator.*
		Bx Yellow	AL_F1_P_BLK = 1	*Alarm blocked by PC-program*
14.3	**Alarm Indication**	■ Red flashing	AU_MV>H1 = 1	*Unacknowledged alarm.*
		■ Red	MV>H1 = 1	*Alarm.*
14.4	**H1 Text**	**H1** Grey		*Text in front of the value*
14.5	**H1 Value**	Green	MVH1	*High limit 1 value*
15.1	**Printout blocked**	**P** Yellow	PRINT_F1_BLK = 1	*Printout blocked.*
15.2	**Alarm blocked**	**B** Yellow	AL_F1_BLK = 1	*Alarm blocked by operator.*
		Bx Yellow	AL_F1_P_BLK = 1	*Alarm blocked by PC-program*
15.3	**Alarm Indication**	■ Red flashing	AU_MV<L1 = 1	*Unacknowledged alarm.*
		■ Red	MV<L1 = 1	*Alarm.*
15.4	**L1 Text**	**L1** Grey		*Text in front of the value*
15.5	**L1 Value**	Green	MVL1	*Low limit 1 value*
16.1	**Printout blocked**	**P** Yellow	PRINT_F2_BLK = 1	*Printout blocked.*
16.2	**Alarm blocked**	**B** Yellow	AL_F2_BLK = 1	*Alarm blocked by operator.*
		Bx Yellow	AL_F2_P_BLK = 1	*Alarm blocked by PC-program*
16.3	**Alarm Indication**	■ Red flashing	AU_MV<L2 = 1	*Unacknowledged alarm.*
		■ Red	MV<L2 = 1	*Alarm.*
16.4	**L2 Text**	**L2** Grey		*Text in front of the value*
16.5	**L2 Value**	Green	MVL2	*Low limit 2 value*

No	Description	Presentation	Condition	Remarks
17.1	**DEV**	**DEV** Grey		
17.2	**Printout blocked**	**P** Yellow	PRINT_F1_BLK = 1	*Printout blocked.*
17.3	**Alarm blocked**	**B** Yellow	AL_F1_BLK =1	*Alarm block by operator*
		Bx Yellow	AL_F1_P_BLK = 1	*Alarm blocked by PC-program*
17.4	**Alarm Indication**	■ Red flashing	AU_DEV>H1 = 1	*Unacknowledged alarm.*
		■ Red	DEV>H1 = 1	*Alarm.*
17.5	**H Text**	**H1** Grey		*Text in front of the value*
17.6	**Value**	Cream	DEVH1	
18.1	**Printout blocked**	**P** Yellow	PRINT_F1_BLK = 1	*Printout blocked.*
18.2	**Alarm blocked**	**B** Yellow	AL_F1_BLK = 1	*Alarm blocked by operator*
		Bx Yellow	AL_F1_P_BLK = 1	*Alarm blocked by PC-program*
18.3	**Alarm Indication**	■ Red flashing	AU_DEV<L1 = 1	*Unacknowledged alarm.*
		■ Red	DEV<L1 = 1	*Alarm.*
18.4	**L Text**	**L1** Grey		*Text in front of the value*
18.5	**L Value**	Cream	DEVL1	
19	**LIMITATIONS**			*Limitations*
19.1	**SP Text**	**SP** Grey		*Setpoint*
19.2	**Warning Indication**	■ Yellow	SP=HL = 1	*Setpoint is equal to high setpoint limit*
19.3	**H Text**	**H** Grey		*High limit setpoint*
19.4	**H Value**	Cyan	SETPH	
20.1	**Warning Indication**	■ Yellow	SP=LL = 1	*Setpoint is equal to low setpoint limit*
20.2	**L Text**	**L** Grey		*Low limit setpoint*
20.3	**L Value**	Cyan	SETPL	
21.1	**OUT Text**	**OUT** Grey		*Output*
21.2	**Warning Indication**	■ Yellow	OUT=HL = 1	*Output is equal to output high limit*
21.3	**H Text**	**H** Grey		*Output high limit.*
21.4	**H Value**	Grey	OUTPH, EOLIM = 1	*Output high limit value.*
		Magenta	OUTPH, EOLIM = 0	
21.5	**External H value**	Magenta	EOLIM = 1	*External output high limit value*
		Grey	-	

No	Description	Presentation	Condition	Remarks
22.1	**Warning Indication**	■ Yellow	OUT=LL = 1	*Output is equal to low output limit*
22.2	**L Text**	**L** Grey		*Output low limit.*
22.3	**L Value**	Grey	OUTPL, EOLIM = 1	*Output low limit value.*
		Magenta	OUTPL, EOLIM = 0	
22.4	**External L Value**	Magenta	EOLIM = 1	*External output low limit value.*
		Grey	-	
23	**PARAMETERS**			
23.1	**P**	**P** Green	GAIN > 0	*Gain active*
23.2	**I**	**I** Green	GAIN > 0 and TI > 0	*Integration active*
23.3	**D**	**D** Green	GAIN > 0 and TD > 0	*Derivation active*
23.4	**Zone Text**	**Zone** Green	GSENBL = 1	*Gain scheduling active*
23.5	**Zone Value**	Green	GSENBL = 1	*Gain scheduling zone*
24.1	**Present Text**	**Present** Grey		*Present parameters*
24.2	**Text**		PRESENT_OBT = 0	*Default setting. Invisible.*
		(M) Green	PRESENT_OBT = 1	*Manual setting*
		(A) Green	PRESENT_OBT = 2	*Autotuned setting*
24.3	**Saved Text**	**Saved** Grey		*Saved parameters*
24.4	**Text**		SAVED_OBT = 0	*Default setting. Invisible.*
		(M) Green	SAVED_OBT = 1	*Manual setting*
		(A) Green	SAVED_OBT = 2	*Autotuned setting*
25.1	**Gain Text**	**Gain** Grey		*Gain*
25.2	**Present Gain Value**	Green		
25.3	**Saved Gain Value**	Green		
26.1	**TI Text**	**TI** Grey		*Integration time*
26.2	**Present TI Value**	Green	TI	
26.4	**Unit**	**S** Green		
26.5	**Saved TI Value**	Green		
26.5	**Unit**	**S** Green		
27.1	**TD Text**	**TD** Grey		*Derivation time*
27.2	**Present TD Value**	Green	TD	
27.3	**Unit**	**S** Green		
27.4	**Saved TD Value**	Green		
27.5	**Unit**	**S** Green		

No	Description	Presentation	Condition	Remarks
28.1	**BETA Text**	**BETA** Grey		*Setpoint factor BETA*
28.2	**Present BETA Value**	Green	BETA	
28.3	**Saved BETA Value**	Green		
29.1	**Alarm Indication**	■ Red flashing	INV_TSAMP = 1	*Unacknowledged TS alarm.*
		■ Red	INV_TSAMP = 1	*TS Alarm. There is one or more invalid sample rates.*
29.2	**TS Text**	**TS** Grey		*Sampling time*
29.3	**Present TS Value**	Green	TS	
29.4	**Unit**	**s** Green		
29.5	**Saved TS Value**	Green		
29.6	**Unit**	**s** Green		
30.1	**DZ Text**	**DZ** Grey		*Deadzone*
30.2	**Value**	Green	DZ	
30.3	**Unit**	**%** Green		
31.1	**Response Text**	**Response** Grey		*Response type*
31.2	**Response Type Text**	**Extra Damped** Green	RESPTYPE = EXTRA DAMPED	
		Damped Green	RESPTYPE = DAMPED	
		Normal Green	RESPTYPE = NORMAL	
		Fast Green	RESPTYPE = FAST	
		Extra Fast Green	RESPTYPE = EXTRA FAST	
32.1	**Freq Limit Text**	**Freq Limit** Grey		*Design frequency limit*
32.2	**Value**	Green	FREQLIM	
		None Green		*Infinite frequency limit.*
32.3	**Unit**	**Rad/s** Green		
33.1	**Frequency Text**	**Frequency** Grey		*Design frequency. Shown only when an autotuned setting exist.*
33.2	**Value**	Green		
33.3	**Unit**	**Rad/s** Green		*Design frequency unit.*

No	Description	Presentation	Condition	Remarks
34.1	**Zone Info Text**	**Zone Info** Grey		*Gain scheduling zone information*
34.2	**Text**	**- -** Green	ZONE1_OBT = 0	*Default*
		M - Green	ZONE1_OBT = 1	*Manual setting*
		A - Green	ZONE1_OBT = 2	*Autotuned setting*
		- V Green	ZONE1_OBT = 4	*The zone has been visited during autotuning*
		MV Green	ZONE1_OBT = 5	*Manual setting and the zone has been visited during autotuning*
		AV Green	ZONE1_OBT = 6	*Autotuned setting and the zone has been visited during autotuning*
34.3	**Text**	**- -** Green	ZONE2_OBT = 0	*Default*
		M - Green	ZONE2_OBT = 1	*Manual setting*
		A - Green	ZONE2_OBT = 2	*Autotuned setting*
		- V Green	ZONE2_OBT = 4	*The zone has been visited during autotuning*
		MV Green	ZONE2_OBT = 5	*Manual setting and the zone has been visited during autotuning*
		AV Green	ZONE2_OBT = 6	*Autotuned setting and the zone has been visited during autotuning*
34.4	**Text**	**- -** Green	ZONE3_OBT = 0	*Default*
		M - Green	ZONE3_OBT = 1	*Manual setting*
		A - Green	ZONE3_OBT = 2	*Autotuned setting*
		- V Green	ZONE3_OBT = 4	*The zone has been visited during autotuning*
		MV Green	ZONE3_OBT = 5	*Manual setting and the zone has been visited during autotuning*
		AV Green	ZONE3_OBT = 6	*Autotuned setting and the zone has been visited during autotuning*

No	Description	Presentation	Condition	Remarks
34.5	**Text**	**- -** Green	ZONE4_OBT = 0	*Default*
		M - Green	ZONE4_OBT = 1	*Manual setting*
		A - Green	ZONE4_OBT = 2	*Autotuned setting*
		- V Green	ZONE4_OBT = 4	*The zone has been visited during autotuning*
		MV Green	ZONE4_OBT = 5	*Manual setting and the zone has been visited during visit autotuning*
		AV Green	ZONE4_OBT = 6	*Autotuned setting and the zone has been visited during autotuning*
34.6	**Text**	**- -** Green	ZONE5_OBT = 0	*Default*
		M - Green	ZONE5_OBT = 1	*Manual setting*
		A - Green	ZONE5_OBT = 2	*Autotuned setting*
		- V Green	ZONE5_OBT = 4	*The zone has been visited during autotuning*
		MV Green	ZONE5_OBT = 5	*Manual setting and the zone has been visited during visit autotuning*
		AV Green	ZONE5_OBT = 6	*Autotuned setting and the zone has been visited during autotuning*
35.1	**MV Text**	**MV** Grey		*Text in front of the value*
35.2	**MV Value**	**? ? ?** Red	AI_ERR	*Signal error*
			MV	*Measured value*
		Green	-	
35.3	**MV Unit**		UNIT	*Measured unit*
		Green	-	
36.1	**SP Text**	**SP** Grey		*Text in front of the value*
36.2	**SP Value**		SETP	*Setpoint value*
		Cyan	-	
36.3	**SP Unit**		UNIT	*Setpoint unit*
		Cyan	-	
37.1	**OUT Text**	**OUT** Grey		*Text in front of the value*
37.2	**OUT Value**		OUT	*Output value*
		Magenta	-	
37.3	**OUT Unit**		OUTUNIT	*Output unit*
		Magenta	-	
37.4	**External OUT Limitation Indication**	**X** Yellow	(OUT=HL = 1 or OUT=LL= 1) and EOLIM = 1	*OUT limited by external limitation*

No	Description	Presentation	Condition	Remarks
38.1	**ACT Text**	**ACT** Grey	SHOW_ACT = 1	*Actuator position*
38.2	**ACT Value**		ACTPOS	*Actuator value*
		Blue	SHOW_ACT = 1	
38.2	**ACT Unit**		OUTUNIT	*Actuator unit*
		Blue	SHOW_ACT = 1	
39.1	**DEV Text**	**DEV** Grey		*Text in front of the value*
39.2	**DEV Value**		DEV	*Deviation value.* *DEV = MV - SP*
		Cream		
39.3	**DEV Unit**	**%** Cream		*Deviation unit*
40.1	**Bal Indicator**	■ Green filled	BAL = 1	*Balance control mode*
40.2	**Bal Mode**	**Bal** Green	BAL = 1	
		Bal Grey	-	
40.3		**Local** Green	LOCAL = 1	*Balance Local control mode*
41.1	**Man Indicator**	■ Grey	MAN = 1 and ATENBL = 1	*When autotuning is finished manual control mode is resumed*
		■ Green	MAN = 1	*Manual control mode*
41.2	**Man Mode**	**Man** Green	MAN = 1	
		Man Grey	-	
41.3		**Clamped** Green	CLAMP = 1	*Man Clamped control mode*
		Forced Green	MANFD = 1	*Man Forced control mode*
41.4	**Out Text**	**OUT** Grey		*Text in front of the value*
41.5	**Man Out Value**		MANOUT	*Man Out value*
		Magenta	MAN = 1	*Manual mode*
		Grey	-	
42.1	**Auto Indicator**	■ Grey	AUTO = 1 and ATENBL = 1	*When autotuning is finished control mode auto is resumed*
		■ Green	AUTO = 1	
42.2	**Auto Mode**	**Auto** Green	AUTO = 1	*Auto control mode*
		Auto Grey	-	
42.3	**SP Text**	**SP** Grey		*Text in front of the value*
42.4	**Auto Setpoint Value**		SETP	*Auto Setpoint value*
		Cyan	AUTO = 1	*Auto mode*
		Grey	-	

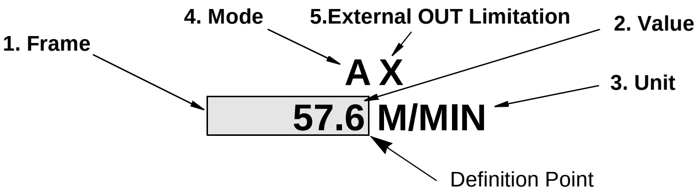
No	Description	Presentation	Condition	Remarks
43.1	**E1 Indicator**	■ Grey	E1 = 1 and ATENBL = 1	*When autotuning is finished control mode E1 is resumed*
		■ Green	E1 =1	
43.2	**E1 Mode**	**E1** Green	E1 =1	*Text behind the indication*
		E1 Grey	-	
43.3	**E1 Name**		E1NAME	*User text behind the text E1*
		Green	E1 = 1	
		Grey	-	
43.4	**SP Text**	**SP** Grey		*Text in front of the value*
43.5	**E1 Setpoint Value**		EXTREF1	*E1 control mode setpoint*
		Green	E1 = 1	*E1 mode*
		Grey	-	
44.1	**E1 Mode Indicator**	■ Grey	E2 = 1 and ATENBL = 1	*When autotuning is finished control mode E2 is resumed*
		■ Green	E2 = 1	
44.2	**E2 Mode**	**E2** Green	E2 = 1	*E2 control mode*
		E2 Grey	-	
44.3	**E2 Name**		E2NAME	
		Green	E2 = 1	
		Grey	-	
44.4	**SP Text**	**SP** Grey		*Text in front of the value*
44.5	**E2 Setpoint Value**		EXTREF2	*E2 control mode setpoint*
		Green	E2 = 1	*E2 mode*
		Grey	-	
45.1	**E3 Mode Indicator**	■ Grey	E3 = 1 and ATENBL = 1	*When autotuning is finished control mode E3 is resumed*
		■ Green	E3 = 1	
45.2	**E3 Mode**	**E3** Green	E3 = 1	*External 3 control mode*
		E3 Grey	-	
45.3	**E3 Name**		E3NAME	
		Green	E2 = 1	
		Grey	-	
45.4	**OUT Text**	**OUT** Grey		*Text in front of the value*
45.5	**E3 Output Value**		EXTREF3	*E3 control mode output*
		Green	E3 = 1	*E3 mode*
		Grey	-	

No	Description	Presentation	Condition	Remarks
46.1	**Autotuning Alarm Indicator**	■ Red flashing	AL_F5_UNACK = 1	*Unacknowledged alarm*
		■ Red		*Alarm*
46.2	**Autotuning Indicator**	■ Green	ATENBL = 1	*Autotuning active*
46.3	**Autotuning**	**Autotuning** Green	ATENBL = 1	*Autotuning active.*
		Autotuning Grey		
46.4	**Text**	**Off** Grey		*Autotuning failed or stopped.*
		Done Grey		*Autotuning was successful.*
		Listen Phase Green	ATENBL = 1	*Check process value variation.*
		Relay Phase Green	ATENBL = 1	*Relay feedback with sample rate selection and design calculations.*
		Excite Phase Green	ATENBL = 1	*Adaptive control with setpoint excitation.*
		Verify Phase Green	ATENBL = 1	*Verify setting with a setpoint step.*
47	**Text**	**Aborted by PC** Green		*Autotuning aborted by PC-input LOCALFL, LOCAL, BALIN, CLAMP, ATENBL or command Man Forced or AI error.*
		Failed Green		*Autotuning failed.*
		Verify Uncertain Green		*The response of the step outside bounds but not rejected and the design is considered uncertain.*
		Verify OK Green		*The response of the step within bound of the design.*
48	**Text**	**Outside Start Zone** Green		*Zone has changed during autotuning with gain scheduling. Text only visible during autotuning.*
49	**Text**	**Low Excitation** Green		*Excitation level too low.*
50.1	**Text**	**Step** Green		*Number of listen steps.*
		OUT Step Green		*Number of output steps from the beginning of relay phase.*
		SP Step Green		*Number of setpoint steps from the beginning of excitation phase.*
50.2	**Counter**	Green		*Counter value.*

No	Description	Presentation	Condition	Remarks
51	**Text**	**timeout (CONTINUE restarts counter)** Green		*The setpoint step counter has reach max number of steps - 2.*
		timeout (ABORTS if Verify fails) Green		*The setpoint step counter has reach max number of steps - 2.*
52	**Text**	**CONTINUE, ACCEPT or STOP ?** Green	AT_ALERT = 1	*Question to the operator. Continue tune, accept and save setting or stop autotuning and restore setting.*
53.1	**Adaptation Alarm Indicator**	■ Red flashing	AL_F5_UNACK = 1	*Unacknowledged alarm.*
		■ Red		*Alarm.*
53.2	**Adaptation Indicator**	■ Green	ADAPON = 1	*Adaptation active.*
		■ Yellow		*1. Adaptation blocked by PC program or* *2. Not mode Auto, E1 or E2 or* *3. No autotuned setting exist.*
53.3	**Adaptation**	**Adaptation** Green	ADAPON = 1	*Adaptation active.*
		Adaptation Grey		
53.4	**Text**	**Failed** Green		*Alarm text.*

4.14.5 PIDAPD01

Presentation:



Behavior:

No	Description	Presentation	Condition	Remarks
1	**SelectFrame**	White	SELECTED = 1	*Selected*
		Dotted Yellow	AL_F1_BLK = 1 or AL_F2_BLK = 1	*Blocked*
		Black	-	FrameColor
2	**Measured Value**		MV	*Object value*
		? ? ? Red flashing	AI_ERR AL_UNACK = 1	*Unacknowledged signal error*
		Red flashing	AL_UNACK = 1	*Unacknowledged alarm*
		? ? ? Red	AI_ERR	*Signal error*
		Red	DISTURB = 1	*Alarm*
		Green	-	NormalColor
3	**Unit**		UnitVisible = onRequest	*Object unit*
		Green	UNIT	NormalColor
		-	UnitVisible = noSubscription	*Unit is invisible*

No	Description	Presentation	Condition	Remarks
4	**Mode**		ModeVisible = true	*Object mode*
		BaLo Green	LOCAL = 1	*Bal Local mode* ModeColor
		Bal Green	BAL = 1	*Bal mode* ModeColor
		MCp Green	CLAMP = 1	*Man Clamped mode* ManModeColor
		MFd Green	MANFD = 1	*Man Forced mode* ManModeColor
		M AT Green	MAN = 1 and ATENBL = 1	*Man mode and Autotuning* ManModeColor
		M Green	MAN = 1	*Man mode* ManModeColor
		A AT Green	AUTO = 1 and ATENBL = 1	*Auto mode and Autotuning* AutoModeColor
		A Ad Green	AUTO = 1 and ADAPON = 1	*Auto mode and Adaptation* AutoModeColor
		A Green	AUTO = 1	*Auto mode* AutoModeColor
		E1 AT Green	E1 = 1 and ATENBL = 1	*E1 mode and Autotuning* E1ModeColor
		E1 Ad Green	E1 = 1 and ADAPON = 1	*E1 mode and Adaptation* E1ModeColor
		E1 Green	E1 = 1	*E1 mode* E1ModeColor
		E2 AT Green	E2 = 1 and ATENBL = 1	*E2 mode and Autotuning* ModeColor
		E2 Ad Green	E2 = 1 and ADAPON = 1	*E2 mode and Adaptation* ModeColor
		E2 Green	E2 = 1	*E2 mode*
		E3 AT Green	E3 = 1 and ATENBL = 1	*E3 mode and Autotuning* ModeColor
		E3 Green	E3 = 1	*E3 mode* ModeColor
		-	ModeVisible = false	*Mode is invisible*
5	**External OUT Limitation**		InterlockVisible = true	*External output limitation*
		X Yellow	(OUT=HL = 1 or OUT=LL = 1) and EOLIM= 1	*External output limitation* InterlockColor
		-	InterlockVisible = false	*External limitation is invisible*

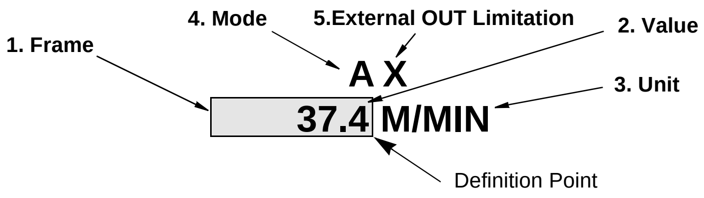
The conditions are in priority order. Underlined parameters are configurable.

Configuration:

Parameters	Affects	Options (bold is default)	Remarks
ModeVisible	4. Mode	**true**, false	
InterlockVisible	5. External OUT Limitation	**true**, false	
UnitVisible	3. Unit	**onRequest**, noSubscription	
NormalColor	2. Measured Value	**K5** (Green), any color	
ModeColor	4. Mode	**K5** (Green), any color	
ManModeColor	4. Mode	**K5** (Green), any color	
AutoModeColor	4. Mode	**K5** (Green), any color	
E1ModeColor	4. Mode	**K5** (Green), any color	
InterlockColor	5. External OUT Limitation	**K3** (Yellow), any color	
SelectAreaColor	1. SelectArea	**K16** (Black), any color	
Font	2. Measured Value and 3. Unit	**FA40**, any font	
FrameColor	1. SelectFrame	**K16** (Black), any color	
FrameWidth	1. SelectFrame	**2**, (1..4)	
NumberOfChar	2. Measured Value	**7**	*Including* ***.*** *and* ***-***
UseDisplayColor	4. Mode	**false**, true	*true if DisplayColor used*
DisplayColor	4. Mode	**N13** (Black), any color	*Bg for Mode if UseDisplayColor is true*

4.14.6 PIDAPD02

Presentation:



Behavior:

No	Description	Presentation	Condition	Remarks
1	**SelectFrame**	White	SELECTED = 1	*Selected*
		Dotted Yellow	AL_F1_BLK = 1 or AL_F2_BLK = 1	*Blocked*
		Black	-	FrameColor
2	**SP Value**		SETP	*Setpoint value*
		Red flashing	AL_UNACK = 1	
		Red	DISTURB = 1	
		Cyan	-	NormalColor
3	**Unit**		UnitVisible = onRequest	*Object unit*
		Cyan	UNIT	NormalColor
		-	UnitVisible = noSubscription	*Unit is invisible*

No	Description	Presentation	Condition	Remarks
4	**Mode**		ModeVisible = true	*Object mode*
		BaLo Green	LOCAL = 1	*Bal Local mode* ModeColor
		Bal Green	BAL = 1	*Bal mode* ModeColor
		MCp Green	CLAMP = 1	*Man Clamped mode* ManModeColor
		MFd Green	MANFD = 1	*Man Forced mode* ManModeColor
		M AT Green	MAN = 1 and ATENBL = 1	*Man mode and Autotuning* ManModeColor
		M Green	MAN = 1	*Man mode* ManModeColor
		A AT Green	AUTO = 1 and ATENBL = 1	*Auto mode and Autotuning* AutoModeColor
		A Ad Green	AUTO = 1 and ADAPON = 1	*Auto mode and Adaptation* AutoModeColor
		A Green	AUTO = 1	*Auto mode* AutoModeColor
		E1 AT Green	E1 = 1 and ATENBL = 1	*E1 mode and Autotuning* E1ModeColor
		E1 Ad Green	E1 = 1 and ADAPON = 1	*E1 mode and Adaptation* E1ModeColor
		E1 Green	E1 = 1	*E1 mode* E1ModeColor
		E2 AT Green	E2 = 1 and ATENBL = 1	*E2 mode and Autotuning* ModeColor
		E2 Ad Green	E2 = 1 and ADAPON = 1	*E2 mode and Adaptation* ModeColor
		E2 Green	E2 = 1	*E2 mode*
		E3 AT Green	E3 = 1 and ATENBL = 1	*E3 mode and Autotuning* ModeColor
		E3 Green	E3 = 1	*E3 mode* ModeColor
		-	ModeVisible = false	*Mode is invisible*
5	**External OUT Limitation**		InterlockVisible = true	*External output limitation*
		X Yellow	(OUT=HL = 1 or OUT=LL = 1) and EOLIM= 1	*External output limitation* InterlockColor
		-	InterlockVisible = false	*External limitation is invisible*

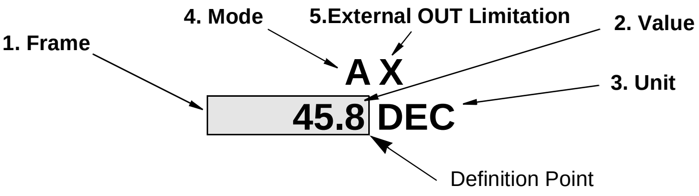
The conditions are in priority order. Underlined parameters are configurable.

Configuration:

Parameters	**Affects**	**Options (bold is default)**	**Remarks**
ModeVisible	4. Mode	**true**, false	
InterlockVisible	5. External OUT Limitation	**true**, false	
UnitVisible	3. Unit	**onRequest**, noSubscription	
NormalColor	2. Setpoint Value	**K9** (Cyan), any color	
ModeColor	4. Mode	**K5** (Green), any color	
ManModeColor	4. Mode	**K5** (Green), any color	
AutoModeColor	4. Mode	**K5** (Green), any color	
E1ModeColor	4. Mode	**K5** (Green), any color	
InterlockColor	5. External OUT Limitation	**K3** (Yellow), any color	
SelectAreaColor	1. SelectArea	**K16** (Black), any color	
Font	2. Setpoint Value and 3. Unit	**FA40**, any font	
FrameColor	1. SelectFrame	**K16** (Black), any color	
FrameWidth	1. SelectFrame	**2**, (1..4)	
NumberOfChar	2. Setpoint Value	**7**	*Including* ***.*** *and* ***-***
UseDisplayColor	4. Mode	**false**, true	*true if DisplayColor used*
DisplayColor	4. Mode	**N13** (Black), any color	*Bg for Mode if UseDisplayColor is true*

4.14.7 PIDAPD03

Presentation:



Behavior:

No	Description	Presentation	Condition	Remarks
1	**SelectFrame**	White	SELECTED = 1	*Selected*
		Dotted Yellow	AL_F1_BLK = 1 or AL_F2_BLK = 1	*Blocked*
		Black	-	FrameColor
2	**Output Value**		OUT	*Output value*
		Red flashing	AL_UNACK = 1	
		Red	DISTURB = 1	
		Magenta	-	NormalColor
3	**Unit**		UnitVisible = onRequest	*Object output unit*
		Magenta	OUTUNIT	NormalColor
		-	UnitVisible = noSubscription	*Unit is invisible*

No	Description	Presentation	Condition	Remarks
4	**Mode**		ModeVisible = true	*Object mode*
		BaLo Green	LOCAL = 1	*Bal Local mode* ModeColor
		Bal Green	BAL = 1	*Bal mode* ModeColor
		MCp Green	CLAMP = 1	*Man Clamped mode* ManModeColor
		MFd Green	MANFD = 1	*Man Forced mode* ManModeColor
		M AT Green	MAN = 1 and ATENBL = 1	*Man mode and Autotuning* ManModeColor
		M Green	MAN = 1	*Man mode* ManModeColor
		A AT Green	AUTO = 1 and ATENBL = 1	*Auto mode and Autotuning* AutoModeColor
		A Ad Green	AUTO = 1 and ADAPON = 1	*Auto mode and Adaptation* AutoModeColor
		A Green	AUTO = 1	*Auto mode* AutoModeColor
		E1 AT Green	E1 = 1 and ATENBL = 1	*E1 mode and Autotuning* E1ModeColor
		E1 Ad Green	E1 = 1 and ADAPON = 1	*E1 mode and Adaptation* E1ModeColor
		E1 Green	E1 = 1	*E1 mode* E1ModeColor
		E2 AT Green	E2 = 1 and ATENBL = 1	*E2 mode and Autotuning* ModeColor
		E2 Ad Green	E2 = 1 and ADAPON = 1	*E2 mode and Adaptation* ModeColor
		E2 Green	E2 = 1	*E2 mode*
		E3 AT Green	E3 = 1 and ATENBL = 1	*E3 mode and Autotuning* ModeColor
		E3 Green	E3 = 1	*E3 mode* ModeColor
		-	ModeVisible = false	*Mode is invisible*
5	**External OUT Limitation**		InterlockVisible = true	*External output limitation*
		X Yellow	(OUT=HL = 1 or OUT=LL = 1) and EOLIM= 1	*External output limitation* InterlockColor
		-	InterlockVisible = false	*External limitation is invisible*

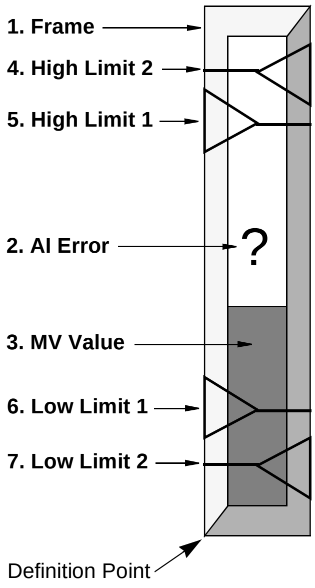
The conditions are in priority order. Underlined parameters are configurable.

Configuration:

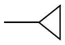
Parameters	**Affects**	**Options (bold is default)**	**Remarks**
ModeVisible	4. Mode	**true**, false	
InterlockVisible	5. External OUT Limitation	**true**, false	
UnitVisible	3. Unit	**onRequest**, noSubscription	
NormalColor	2. Output Value	**K11** (Magenta), any color	
ModeColor	4. Mode	**K5** (Green), any color	
ManModeColor	4. Mode	**K5** (Green), any color	
AutoModeColor	4. Mode	**K5** (Green), any color	
E1ModeColor	4. Mode	**K5** (Green), any color	
InterlockColor	5. External OUT Limitation	**K3** (Yellow), any color	
SelectAreaColor	1. SelectArea	**K16** (Black), any color	
Font	2. Output Value and 3. Unit	**FA40**, any font	
FrameColor	1. SelectFrame	**K16** (Black), any color	
FrameWidth	1. SelectFrame	**2**, (1..4)	
NumberOfChar	2. Output Value	**7**	*Including **.** and **-***
UseDisplayColor	4. Mode	**false**, true	*true if DisplayColor used*
DisplayColor	4. Mode	**N13** (Black), any color	*Bg for Mode if UseDisplayColor is true*

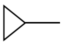
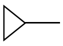
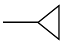
4.14.8 PIDAPD51

Presentation:



Behavior:

No	Description	Presentation	Condition	Remarks
1.1	**SelectFrame**	White	SELECTED = 1	*Object frame*
		Black	-	FrameColor
1.2	**TopLeftEdge**			*Three Dimensions effect*
		Grey	-	TopLeftColor
1.3	**BottomRightEdge**			*Three Dimensions effect*
		Grey	-	BottomRightColor
2	**AI Error**	**?** Red flashing	AI_ERR and AL_UNACK = 1	*Unacknowledged signal error*
		? Red	AI_ERR	*AI error alarm*
3	**MV Value**		MV	*Object value*
		-	AI_ERR	*Invisible - Signal error*
		Red flashing	AL_UNACK = 1	*Unacknowledged alarm*
		Red	DISTURB =1	*Alarm*
		Green		NormalColor
4	**High Limit 2**		MVH2	*Alarm High limit 2*
		-	MVH2 > MAX	*Invisible*
		Filled Yellow	MV>H2 = 1 and AL_F2_BLK = 1	
		Unfilled Yellow	AL_F2_BLK = 1	
		Filled Red flashing	MV>H2 = 1 and AU_MV>H2 = 1	
		Unfilled Red flashing	AU_MV>H2 = 1	
		Filled Red	MV>H2 = 1	
		Unfilled Grey	-	LimitColor

No	Description	Presentation	Condition	Remarks
5	**High Limit 1**		MVH1	*Warning High limit 1*
		-	MVH1 > MAX	*Invisible*
		Filled Yellow	MV>H1 = 1 and AL_F1_BLK = 1	
		Unfilled Yellow	AL_F1_BLK = 1	
		Filled Red flashing	MV>H1 = 1 and AU_MV>H1 = 1	
		Unfilled Red flashing	AU_MV>H1 = 1	
		Filled Red	MV>H1 = 1	
		Unfilled Grey	-	LimitColor
6	**Low Limit 1**		MVL1	*Warning Low limit 1*
		-	MVL1 < MIN	*Invisible*
		Filled Yellow	MV<L1 = 1 and AL_F1_BLK = 1	
		Unfilled Yellow	AL_F1_BLK = 1	
		Filled Red flashing	MV<L1 = 1 and AU_MV<L1 = 1	
		Unfilled Red flashing	AU_MV<L1 = 1	
		Filled Red	MV<L1 = 1	
		Unfilled Grey	-	LimitColor
7	**Low Limit 2**		MVL2	*Alarm Low limit 2*
		-	MVL2 < MIN	*Invisible*
		Filled Yellow	MV<L2 = 1 and AL_F2_BLK = 1	
		Unfilled Yellow	AL_F2_BLK = 1	
		Filled Red flashing	MV<L2 = 1 and AU_MV<L2 = 1	
		Unfilled Red flashing	AU_MV<L2 = 1	
		Filled Red	MV<L2 = 1	
		Unfilled Grey	-	LimitColor

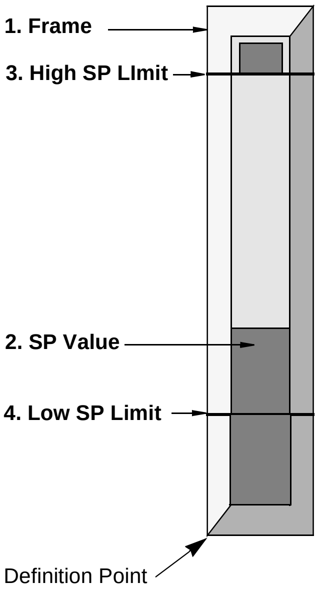
The conditions are in priority order. Underlined parameters are configurable.

Configuration:

Parameters	Affects	Options (bold is default)	Remarks
NormalColor	3. MV Value	**K5** (Green), any color	
TopLeftColor	1.2 TopLeftEdge	**N13** (Black), any color	*Regarding the choice of the color it will be three dimension effect*
BottomRightColor	1.3 BottomRightEdge	**N13** (Black), any color	
FrameColor	1.1 SelectFrame	**K16** (Black), any color	
FrameWidth	1.1 SelectFrame	**2, (1..4)**	
BarBackColor	3. MV Value	**K16** (Black), any color	*Background color of the bargraph*
LimitColor	4. High Limit 2, 5. High Limit 1, 6. Low Limit 1 and 7. Low Limit 2	**M16** (Grey), any color	

4.14.9 PIDAPD52

Presentation:



Behavior:

No	Description	Presentation	Condition	Remarks
1.1	**SelectFrame**	White	SELECTED = 1	*Object frame*
		Black	-	FrameColor
1.2	**TopLeftEdge**			*Three Dimensions effect*
		Grey	-	TopLeftColor
1.3	**BottomRightEdge**			*Three Dimensions effect*
		Grey	-	BottomRightColor
2	**Setpoint Value**		SETP	*Object setpoint value*
		Red flashing	AL_UNACK = 1	
		Red	DISTURB = 1	
		Cyan	-	NormalColor
3	**High SP Limit**		SETPH	*Upper setpoint limit*
		Yellow	SP=HL = 1	*Limitation line and mesh*
		Grey	-	LimitColor
4	**Low SP Limit**		SETPL	*Lower setpoint limit*
		Yellow	SP=LL = 1	*Limitation line and mesh*
		Grey	-	LimitColor

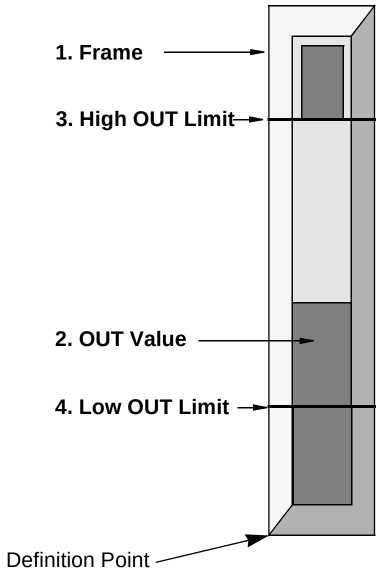
The conditions are in priority order. Underlined parameters are configurable.

Configuration:

Parameters	**Affects**	**Options (bold is default)**	**Remarks**
NormalColor	2. Setpoint Value	**K9** (Cyan), any color	
TopLeftColor	1.2 TopLeftEdge	**N13** (Black), any color	*Regarding the choice of the color it will be three dimension effect*
BottomRightColor	1.3 BottomRightEdge	**N13** (Black), any color	
FrameColor	1.3 SelectFrame	**K16** (Black), any color	
FrameWidth	1.1 SelectFrame	**2**, (1..4)	
BarBackColor	2. Setpoint Value	**K16** (Black), any color	*Background color of the bargraph*
LimitColor	3. High SP Limit and 4. Low SP Limit	**M16** (Grey), any color	

4.14.10 PIDAPD53

Presentation:



Behavior:

No	Description	Presentation	Condition	Remarks
1.1	**SelectFrame**	White	SELECTED = 1	*Object frame*
		Black	-	FrameColor
1.2	**TopLeftEdge**			*Three Dimensions effect*
		Grey	-	TopLeftColor
1.3	**BottomRightEdge**			*Three Dimensions effect*
		Grey	-	BottomRightColor
2	**Output Value**		OUT	*Output value*
		Red flashing	AL_UNACK = 1	
		Red	DISTURB = 1	
		Magenta	-	NormalColor
3	**High OUT Limit**		OUTPH	*Upper output limit*
		-	OUTPH > OUTMAX or (EOHL > OUTMAX and EOLIM = 1)	*Invisible*
		Yellow	OUT=HL = 1	*Limitation line and mesh*
		Grey	-	LimitColor

No	Description	Presentation	Condition	Remarks
4	**Low OUT Limit**		OUTPL	*Lower output limit*
		-	OUTPL < OUTMIN or (EOLL < OUTMIN and EOLIM = 1)	*Invisible*
		Yellow	OUT=LL = 1	*Limitation line and mesh*
		Grey	-	LimitColor

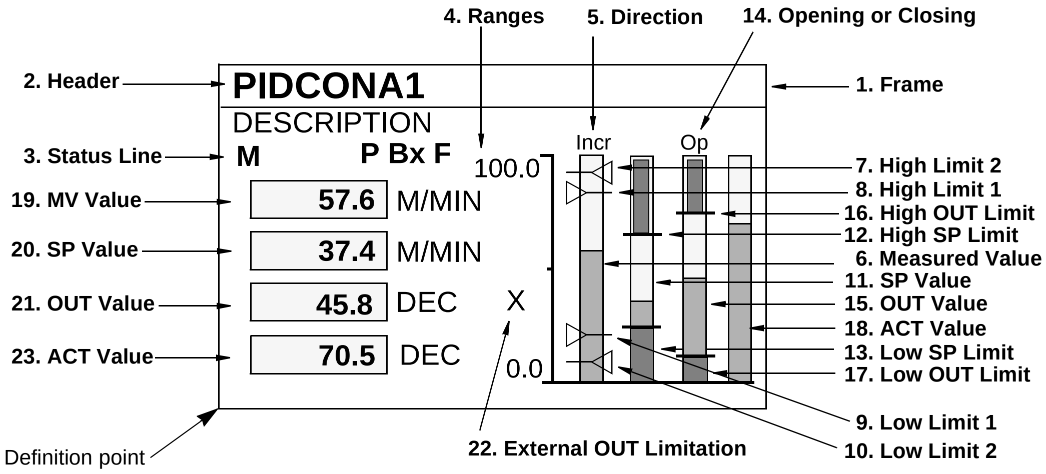
The conditions are in priority order. Underlined parameters are configurable.

Configuration:

Parameters	Affects	Options (bold is default)	Remarks
NormalColor	2. Output Value	**K11** (Magenta), any color	
TopLeftColor	1.2 TopLeftEdge	**N13** (Black), any color	*Regarding the choice of the color it will be three dimension effect*
BottomRightColor	1.3 BottomRightEdge	**N13** (Black), any color	
FrameColor	1.1 SelectFrame	**K16** (Black), any color	
FrameWidth	1.1 SelectFrame	**2**, (1..4)	
BarBackColor	2. Output Value	**K16** (Black), any color	*Background color of the bargraph*
LimitColor	3. High OUT Limit and 4. Low OUT Limit	**M16** (Grey), any color	

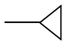
4.14.11 PIDAWI01

Presentation:



Behavior:

No	Description	Presentation	Condition	Remarks
1	**SelectFrame**			*Object select frame*
		White	SELECTED = 1	*Only for overlap*
		Black	-	
2	**Header**		NAME and DESCR	*Object name and description*
		Red flashing	AL_UNACK = 1	*Unacknowledged alarm*
		Red	DISTURB = 1	*Alarm*
		Green	-	*Normal*
3	**Status Line**			
3.1	**Mode**	**BaLo** Green	LOCAL = 1	*Bal Local mode*
		Bal Green	BAL = 1	*Bal mode*
		MCp Green	CLAMP = 1	*Man Clamped mode*
		MFd Green	MANFD = 1	*Man Forced mode*
		M AT Green	MAN = 1 and ATENBL = 1	*Man mode and autotuning*
		M Green	MAN = 1	*Man mode*
		A AT Green	AUTO = 1 and ATENBL = 1	*Auto mode and autotuning*
		A Ad Green	AUTO = 1 and ADAPON = 1	*Auto mode and adaptation*
		A Green	AUTO = 1	*Auto mode*

No	Description	Presentation	Condition	Remarks
		E1 AT Green	E1 = 1 and ATENBL = 1	*E1 mode and autotuning*
		E1 Ad Green	E1 = 1 and ADAPON = 1	*E1 and adaptation*
		E1 Green	E1 = 1	*E1 mode*
		E2 AT Green	E2 = 1 and ATENBL = 1	*E2 mode and autotuning*
		E2 Ad Green	E2 = 1 and ADAPON = 1	*E2 mode and adaptation*
		E2 Green	E2 =1	*E2 mode*
		E3 AT Green	E3 = 1 and ATENBL = 1	*E3 mode and autotuning*
		E3 Green	E3 =1	*E3 mode*
3.2	**Printout Blocked**	**P** Yellow	PRINT_F1_BLK = 1 or PRINT_F2_BLK = 1	*Printout of alarm blocked*
3.3	**Alarm Blocked**	**B** Yellow	AL_F1_BLK = 1 or AL_F2_BLK = 1	*Alarm blocked by operator*
		Bx Yellow	AL_F1_P_BLK = 1 or AL_F2_P_BLK = 1	*Alarm blocked by PC*
3.4	**Alarm**	**F** Red	DISTURB = 1	*Alarm*
4.1	**Range Max**	Green	MAX	*Range Max of the MV and SP values*
4.2	**Range Min**	Green	MIN	*Range Min of the MV and SP values*
5	**Direction**	**Incr** Green	REVACT = 1	*Increase. When measured value is increasing, it is counteracted by with increasing output.*
		Decr Green	REVACT = 0	*Decrease. When measured value is decreasing, output also decreasing.*
6	**Measured Value**		MV	*Measured value*
		Green	-	
7	**High Limit 2**		MVH2	*High Alarm limit 2*
		-	MVH2 >= MAX	*Invisible*
		Filled Yellow	MV>H2 = 1 and AL_F2_BLK = 1	
		Unfilled Yellow	AL_F2_BLK = 1	
		Filled Red flashing	MV>H2 = 1 and AU_MV>H2 = 1	
		Unfilled Red flashing	AU_MV>H2 = 1	
		Filled Red	MV>H2 = 1	
		Unfilled Grey	-	

No	Description	Presentation	Condition	Remarks
8	**High Limit 1**		MVH1	*High Warning limit 1*
	▷—	-	MVH1 >= MAX	*Invisible*
		Filled Yellow	MV>H1 = 1 and AL_F1_BLK = 1	
		Unfilled Yellow	AL_F1_BLK = 1	
		Filled Red flashing	MV>H1 = 1 and AU_MV>H1 = 1	
		Unfilled Red flashing	AU_MV>H1 = 1	
		Filled Red	MV>H1 = 1	
		Unfilled Grey	-	
9	**Low Limit 1**		MVL1	*Low Warning limit 1*
	▷—	-	MVL1 <= MIN	*Invisible*
		Filled Yellow	MV<L1 = 1 and AL_F1_BLK = 1	
		Unfilled Yellow	AL_F1_BLK = 1	
		Filled Red flashing	MV<L1 = 1 and AU_MV<L1 = 1	
		Unfilled Red flashing	AU_MV<L1 = 1	
		Filled Red	MV<L1 = 1	
		Unfilled Grey	-	
10	**Low Limit 2**		MVL2	*Low Alarm limit 2*
	—◁	-	MVL2 <= MIN	*Invisible*
		Filled Yellow	MV<L2 = 1 and AL_F2_BLK = 1	
		Unfilled Yellow	AL_F2_BLK = 1	
		Filled Red flashing	MV<L2 = 1 and AU_MV<L2 = 1	
		Unfilled Red flashing	AU_MV<L2 = 1	
		Filled Red	MV<L2 = 1	
		Unfilled Grey	-	
11	**SP Value**		SETP	*Setpoint Value*
		Cyan	-	
12	**High SP Limit**		SETPH	*Upper limit setpoint*
		Yellow	SP=HL = 1	*Limitation line and mesh.*
		Grey	-	
13	**Low SP Limit**		SETPL	*Lower limit setpoint*
		Yellow	SP=LL = 1	*Limitation line and mesh.*
		Grey	-	

No	Description	Presentation	Condition	Remarks
14	**Opening or Closing**	**Op** Magenta	ACT_DIR = OPENING	*Opening. When output is increasing the valve is opening.*
		Cl Magenta	ACT_DIR = CLOSING	*Closing.When output is increasing the valve is closing.*
15	**OUT Value**		OUT	*Output value*
		Magenta	-	
16	**High OUT Limit**		OUTPH	*Upper limit output*
		-	OUTPH > OUTMAX or (EOHL > OUTMAX and EOLIM = 1)	*Invisible*
		Yellow	OUT=HL = 1	*Limitation line and mesh*
		Grey	-	
17	**Low OUT Limit**		OUTPL	*Lower limit output*
		-	OUTPL < OUTMIN or (EOLL < OUTMIN and EOLIM = 1)	*Invisible*
		Yellow	OUT=LL = 1	*Limitation line and mesh*
		Grey	-	
18	**ACT Value**		ACTPOS	*Actuator position*
		Blue	SHOW_ACT = 1	
19	**Measured Value**			*The MV object value*
19.1	**MV Value**	**? ? ?** Red	AI_ERR	*AI Error*
			MV	*Measured value*
		Green	-	
19.2	**MV Unit**		UNIT	*Measured unit*
		Green	-	
20	**Setpoint Value**			*The SP object value*
20.1	**SP Value**		SETP	*Setpoint value*
		Cyan	-	
20.2	**SP Unit**		UNIT	*Setpoint unit*
		Cyan	-	
21	**Output Value**			*The OUT object value*
21.1	**OUT Value**		OUT	*Output value*
		Magenta	-	
21.2	**OUT Unit**		OUTUNIT	*Output unit*
		Magenta	-	

No	Description	Presentation	Condition	Remarks
22	**External OUT Limitation**	**X** Yellow	(OUT=HL = 1 or OUT=LL = 1) and EOLIM = 1	*OUT limited by external limitation*
23	**Actuator Value**			*The ACT object value*
23.1	**ACT Value**		ACTPOS	*Actuator value*
		Blue	SHOW_ACT = 1	
23.2	**SP Unit**		OUTUNIT	*Actuator unit*
		Blue	SHOW_ACT = 1	

4.15 Process Dialog for Process Controller PIDCON

4.15.1 MIN Dialog (No authority key)

4.15.1.1 Keyboard keys

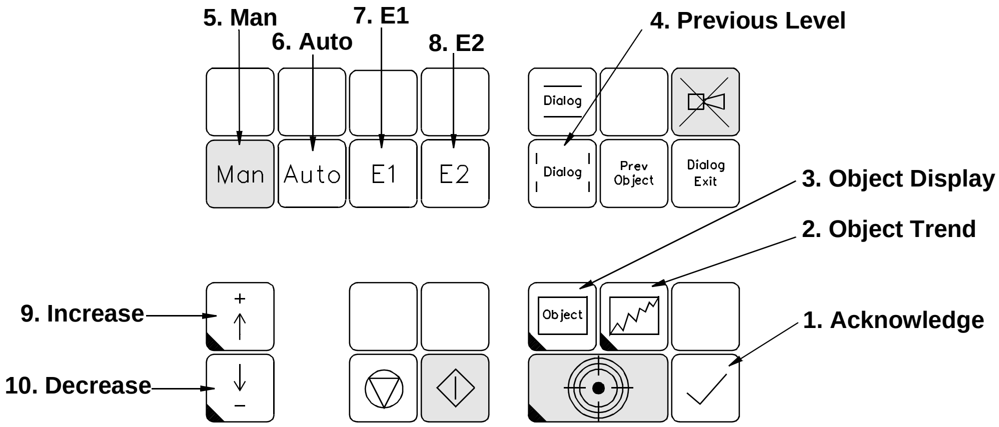


Figure 4-92. Keyboard keys

Key 1: Acknowledge	Perform: Acknowledge	AL_UNACK = 0
Key 2: Object Trend	Select: Object Trend	
Key 3: Object Display	Select: Object Display	
Key 4: Previous Level	Select Dynamic keys: Top Level	
Key 5: Man	Perform: Set to manual mode	MMI_MAN = 1 / MAN = 1
Key 6: Auto	Perform: Set to automatic mode	MMI_AUTO = 1 / AUTO = 1
Key 7: E1	Perform: Set to external1 mode	MMI_E1 = 1 / E1 = 1
Key 8: E2	Perform: Set to external2 mode	MMI_E2 = 1 / E2 = 1
Key 9: Increase	Perform: Increase output value with 0.5 if MAN = 1	MANOUT
	Increase setpoint value with 0.5	SETP
Key 9: Shift + Increase	Perform: Increase output value with 5.0 if MAN = 1	MANOUT
	Increase setpoint value with 5.0	SETP
Key 10: Decrease	Perform: Decrease output value with 0.5 if MAN = 1	MANOUT
	Decrease setpoint value with 0.5	SETP
Key 10: Shift + Decrease	Perform: Decrease output value with 5.0 if MAN = 1	MANOUT
	Decrease setpoint value with 5.0	SETP

4.15.1.2 Dynamic keys, Top Level

D1 Man Forced	D2 E3	D3	D4	D5
D6 OUT	D7 SP	D8	D9	D10 Keyboard...

Figure 4-93. Dynamic keys

D1: Man Forced	Perform: Set to manual forced mode Pressed: green text Released: white text	MANFD = 1
D2: E3	Perform: Set to external 3 mode Pressed: green text Released: white text	MMI_E3 = 1 / E3 = 1
D6: OUT	Pressed: Dialog for changing Output value, value magenta	MANOUT
D7: SP	Pressed: Dialog for changing Setpoint value, value cyan	SETP
D10: Keyboard...	Select Dynamic keys: Keyboard	

4.15.1.3 Dynamic keys, Keyboard

D1 ↑ Increase	D2 Man	D3 Auto	D4 E1	D5 E2
D6 ↓ Decrease	D7 Acknowledge	D8 Object Display	D9 Object Trend	D10

Figure 4-94. Dynamic keys

D1: Increase	Perform: Increase output value with 0.5 if MAN = 1 Increase setpoint value with 0.5	MANOUT SETP
D2: Man	Perform: Set to manual mode	MMI_MAN = 1 / MAN = 1
D3: Auto	Perform: Set to automatic mode	MMI_AUTO = 1 / AUTO = 1
D4: E1	Perform: Set to external1 mode	MMI_E1 = 1 / E1 = 1
D5: E2	Perform: Set to external2 mode	MMI_E2 = 1 / E2 = 1
D6: Decrease	Perform: Decrease output value with 0.5 if MAN = 1 Decrease setpoint value with 0.5	MANOUT SETP
D7: Acknowledge	Perform: Acknowledge	AL_UNACK = 0
D8: Object Display	Select: Object Display	
D9: Object Trend	Select: Object Trend	

4.15.2 MAX Dialog (Authority key)

4.15.2.1 Keyboard keys

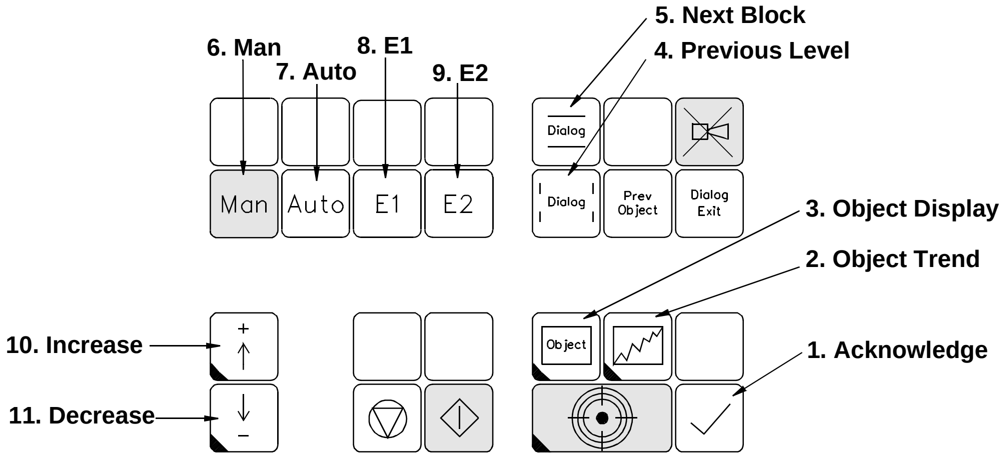


Figure 4-95. Keyboard keys

Key 1: Acknowledge	Perform: Acknowledge	AL_UNACK = 0
Key 2: Object Trend	Select: Object Trend	
Key 3: Object Display	Select: Object Display	
Key 4: Previous Level	Select Dynamic keys: Top Level	
Key 5: Next Block	Page between the dynamic key sets: Block, Limits, Parameters and Keyboard	
Key 6: Man	Perform: Set to manual mode	MMI_MAN = 1 / MAN = 1
Key 7: Auto	Perform: Set to automatic mode	MMI_AUTO = 1 / AUTO = 1
Key 8: E1	Perform: Set to external1 mode	MMI_E1 = 1 / E1 = 1
Key 9: E2	Perform: Set to external2 mode	MMI_E2 = 1 / E2 = 1
Key 10: Increase	Perform: Increase output value with 0.5 if MAN = 1	MANOUT
	Increase setpoint value with 0.5	SETP
Key 10: Shift + Increase	Perform: Increase output value with 5.0 if MAN = 1	MANOUT
	Increase setpoint value with 5.0	SETP
Key 11: Decrease	Perform: Decrease output value with 0.5 if MAN = 1	MANOUT
	Decrease setpoint value with 0.5	SETP
Key 11: Shift + Decrease	Perform: Decrease output value with 5.0 if MAN = 1	MANOUT
	Decrease setpoint value with 5.0	SETP

4.15.2.2 Dynamic keys, Top Level

D1 Man Forced	D2 E3	D3	D4 Block...	D5 Limits...
D6 OUT	D7 SP	D8	D9 Parameters...	D10 Keyboard...

Figure 4-96. Dynamic keys

D1: Man Forced	Perform: Set to manual forced mode Pressed: green text Released: white text	MANFD = 1
D2: E3	Perform: Set to external 3 mode Pressed: green text Released: white text	MMI_E3 = 1 / E3 = 1
D4: Block...	Select Dynamic keys: Block	
D5: Limits...	Select Dynamic keys: Limits	
D6: OUT	Pressed: Dialog for changing Output value, value magenta	MANOUT
D7: SP	Pressed: Dialog for changing Setpoint value, value cyan	SETP
D9: Parameters...	Select Dynamic keys: Parameters	
D10: Keyboard...	Select Dynamic keys: Keyboard	

4.15.2.3 Dynamic keys, Keyboard

D1 ↑ Increase	D2 Man	D3 Auto	D4 E1	D5 E2
D6 ↓ Decrease	D7 Acknowledge	D8 Object Display	D9 Object Trend	D10

Figure 4-97. Dynamic keys

D1: Increase	Perform: Increase output value with 0.5 if MAN = 1 Increase setpoint value with 0.5	MANOUT SETP
D2: Man	Perform: Set to manual mode	MMI_MAN = 1 / MAN = 1
D3: Auto	Perform: Set to automatic mode	MMI_AUTO = 1 / AUTO = 1
D4: E1	Perform: Set to external1 mode	MMI_E1 = 1 / E1 = 1
D5: E2	Perform: Set to external2 mode	MMI_E2 = 1 / E2 = 1
D6: Decrease	Perform: Decrease output value with 0.5 if MAN = 1 Decrease setpoint value with 0.5	MANOUT SETP
D7: Acknowledge	Perform: Acknowledge	AL_UNACK = 0
D8: Object Display	Select: Object Display	
D9: Object Trend	Select: Object Trend	

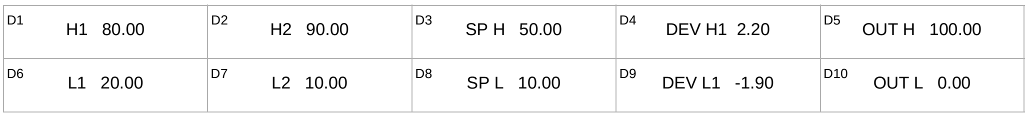
4.15.2.4 Dynamic keys, Block

D1 Block Alarm 1	D2 Block Printout 1	D3	D4 Block Alarm 2	D5 Block Printout 2
D6 Deblock Alarm 1	D7 Deblock Printout 1	D8	D9 Deblock Alarm 2	D10 Deblock Printout 2

Figure 4-98. Dynamic keys

D1: Block Alarm 1	Pressed: yellow text Released: white text	AL_F1_BLK = 1
D2: Block Printout 1	Pressed: yellow text Released: white text	PRINT_F1_BLK = 1
D4: Block Alarm 2	Pressed: yellow text Released: white text	AL_F2_BLK = 1
D5: Block Printout 2	Pressed: yellow text Released: white text	PRINT_F2_BLK = 1
D6: Deblock Alarm 1	Pressed: green text Released: white text	AL_F1_BLK = 0
D7: Deblock Printout 1	Pressed: green text Released: white text	PRINT_F1_BLK = 0
D9: Deblock Alarm 2	Pressed: green text Released: white text	AL_F2_BLK = 0
D10: Deblock Printout 2	Pressed: green text Released: white text	PRINT_F2_BLK = 0

4.15.2.5 Dynamic keys, Limits



D1 H1 80.00	D2 H2 90.00	D3 SP H 50.00	D4 DEV H1 2.20	D5 OUT H 100.00
D6 L1 20.00	D7 L2 10.00	D8 SP L 10.00	D9 DEV L1 -1.90	D10 OUT L 0.00

Figure 4-99. Dynamic keys

D1: H1	Pressed: Dialog for changing High Limit 1, value green	MVH1
D2: H2	Pressed: Dialog for changing High Limit 2, value green	MVH2
D3: SP H	Pressed: Dialog for changing Setpoint High, value cyan	SETPH
D4: DEV H1	Pressed: Dialog for changing Devation High, value cream	DEVH1
D5: OUT H	Pressed: Dialog for changing Output High, value magenta	OUTPH
D6: L1	Pressed: Dialog for changing Low Limit 1, value green	MVL1
D7: L2	Pressed: Dialog for changing Low Limit 2, value green	MVL2
D8: SP L	Pressed: Dialog for changing Setpoint Low, value cyan	SETPL
D9: DEV L1	Pressed: Dialog for changing Devation Low, value cream	DEVL1
D10: OUT L	Pressed: Dialog for changing Output Low, value magenta	OUTPL

4.15.2.6 Dynamic keys, Parameters

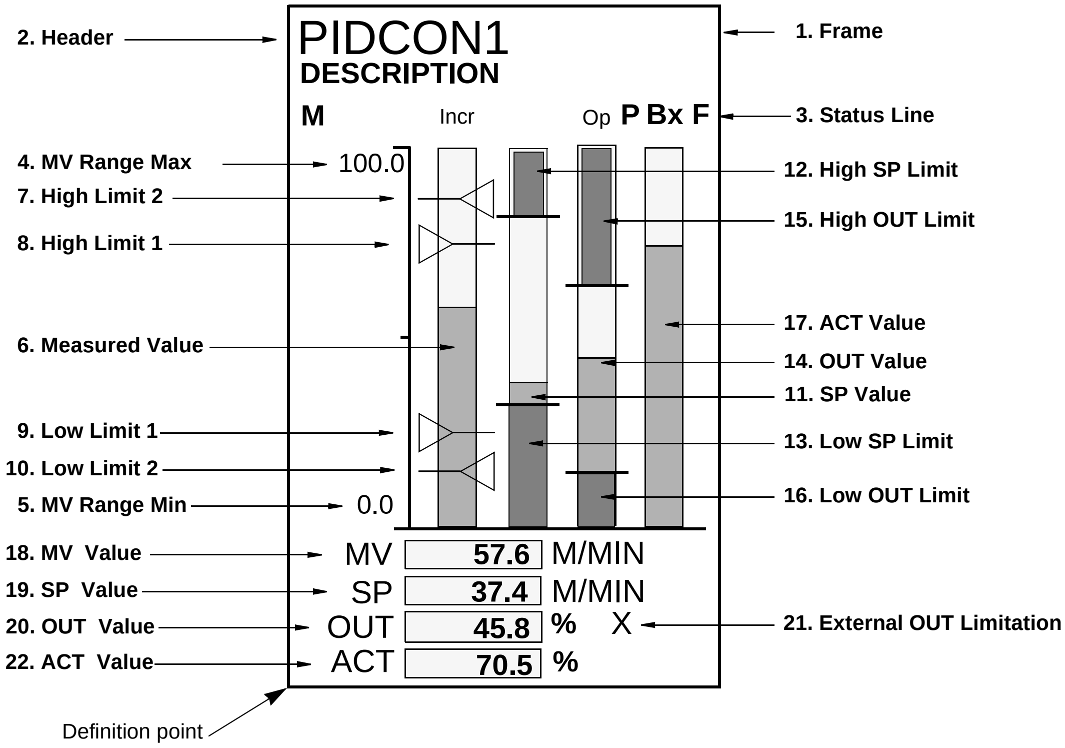
D1 Block I	D2 Block D	D3 Gain 1.32	D4 TI 6.01	D5 TD 4.01
D6 Deblock I	D7 Deblock D	D8	D9 TF 2.45	D10 DZ 0.98

Figure 4-100. Dynamic keys

D1: Block I	Pressed: yellow text Released: white text	BLK_I = 1
D2: Block D	Pressed: yellow text Released: white text	BLK_D = 1
D3: Gain	Pressed: Dialog for changing Gain value, value green	GAIN
D4: TI	Pressed: Dialog for changing TI value, value green	TI
D5: TD	Pressed: Dialog for changing TD value, value green	TD
D6: Deblock I	Pressed: green text Released: white text	BLK_I = 0
D7: Deblock D	Pressed: green text Released: white text	BLK_D = 0
D9: TF	Pressed: Dialog for changing TD value, value green	TF
D10: DZ	Pressed: Dialog for changing DEADZ value, value green	DZ

4.15.3 PIDGR01

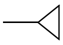
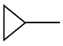
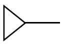
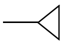
Presentation:



Behavior:

No	Description	Presentation	Condition	Remarks
1	**SelectFrame**	White	SELECTED = 1	*Selected*
		Black	-	
2	**Header**		NAME and DESCR	*Object name and description*
		Red flashing	AL_UNACK = 1	*Unacknowledged alarm*
		Red	DISTURB = 1	*Alarm*
		Green	-	*Normal*

No	Description	Presentation	Condition	Remarks
3	**Status Line**			*Status Line*
3.1	**Mode**	**Ball** Green	LOCAL = 1	*Bal Local mode*
		Bal Green	BAL = 1	*Bal mode*
		M.C.P.O. Green	CLAMPED = 1	*Man Clamped mode* ManModeColor
		MFd Green	MANFD = 1	*Man Forced mode* ManModeColor
		M Green	MAN = 1	*Man mode* ManModeColor
		A Green	AUTO = 1	*Auto mode*
		E1 Green	E1 = 1	*E1 mode*
		E2 Green	E2 = 1	*E2 mode*
		E3 Green	E3 = 1	*E3 mode*
3.2	**Direction**	**Incr** Green	MV_DIR = INCREASING	*Increase of measured value*
		Decr Green	MV_DIR = DECREASING	*Decrease of measured value*
3.3	**Opening or Closing**	**Op** Magenta	ACT_DIR = OPENING	*Actuator position opening*
		Cl Magenta	ACT_DIR = CLOSING	*Actuator position closing*
3.4	**Printout Blocked**	**P** Yellow	PRINT_F1_BLK = 1 or PRINT_F2_BLK = 1	*Printout blocked*
3.5	**Alarm Blocked**	**B** Yellow	AL_F1_BLK = 1 or AL_F2_BLK = 1	*Alarm Blocked by operator*
		Bx Yellow	AL_F1_P_BLK = 1 or AL_F2_P_BLK = 1	*Alarm blocked by PC-program*
3.6	**Alarm Indication**	**F** Red	DISTURB = 1	*Alarm*
4	**MV Range Max**	Green	MAX	*Max Range of the MV and SP values*
5	**MV Range Min**	Green	MIN	*Min Range of the MV and SP values*
6	**Measured Value Bargraph**		MV	*Measured Value*
		Green	-	

No	Description	Presentation	Condition	Remarks
7	**High Limit 2**		MVH2	*Alarm High limit 2*
		-	MVH2 >= MAX	*Invisible*
		Filled Yellow	MV>H2 = 1 and AL_F2_BLK = 1	
		Unfilled Yellow	AL_F2_BLK = 1	
		Filled Red flashing	MV>H2 = 1 and AU_MV>H2 = 1	
		Unfilled Red flashing	AU_MV>H2 = 1	
		Filled Red	MV>H2 = 1	
		Unfilled Grey	-	
8	**High Limit 1**		MVH1	*Warning High limit 1*
		-	MVH1 >= MAX	*Invisible*
		Filled Yellow	MV>H1 = 1 and AL_F1_BLK = 1	
		Unfilled Yellow	AL_F1_BLK = 1	
		Filled Red flashing	MV>H1 = 1 and AU_MV>H1 = 1	
		Unfilled Red flashing	AU_MV>H1 = 1	
		Filled Red	MV>H1 = 1	
		Unfilled Grey	-	
9	**Low Limit 1**		MVL1	*Warning Low limit 1*
		-	MVL1 <= MIN	*Invisible*
		Filled Yellow	MV<L1 = 1 and AL_F1_BLK = 1	
		Unfilled Yellow	AL_F1_BLK = 1	
		Filled Red flashing	MV<L1 = 1 and AU_MV<L1 = 1	
		Unfilled Red flashing	AU_MV<L1 = 1	
		Filled Red	MV<L1 = 1	
		Unfilled Grey	-	
10	**Low Limit 2**		MVL2	*Alarm Low limit 2*
		-	MVL2 <= MIN	*Invisible*
		Filled Yellow	MV<L2 = 1 and AL_F2_BLK = 1	
		Unfilled Yellow	AL_F2_BLK = 1	
		Filled Red flashing	MV<L2 = 1 and AU_MV<L2 = 1	
		Unfilled Red flashing	AU_MV<L2 = 1	
		Filled Red	MV<L2 = 1	
		Unfilled Grey	-	

No	Description	Presentation	Condition	Remarks
11	**SP Value Bargraph**		SETP	*Setpoint value*
		Cyan	-	
12	**High SP Limit**		SETPH	*Upper limit setpoint*
		Yellow	SP=LL = 1	*Limitation line and mesh*
		Grey	-	
13	**Low SP Limit**		SETPL	*Lower limit setpoint*
		Yellow	SP=LL = 1	*Limitation line and mesh*
		Grey	-	
14	**OUT Value Bargraph**		POUT	*Output value*
		Magenta	-	
15	**HIgh OUT Limit**		OUTPH	*Upper limit output*
		-	OUTPH > 100 or (EOHL > 100 and EOLIM = 1)	*Invisible*
		Yellow	OUT=HL = 1	*Limitation line and mesh*
		Grey	-	
16	**Low OUT Limit**		OUTPL	*Lower limit output*
		-	OUTPL < 0 or (EOLL < 0 and EOLIM = 1)	*Invisible*
		Yellow	OUT=LL = 1	*Limitation line and mesh*
		Grey	-	
17	**ACT Value Bargraph**		ACTPOS	*Actuator value*
		Blue	CTRL = ON-OFF	
18	**Measured Value**			*The MV object value*
18.1	**MV**	**MV** Grey		*Text in front of the value*
18.2	**MV Value**	**? ? ?** Red	AI_ERR = 1	*AI Error*
			MV	*Measured value*
		Green	-	
18.3	**MV Unit**		UNIT	*Measured unit*
		Green	-	

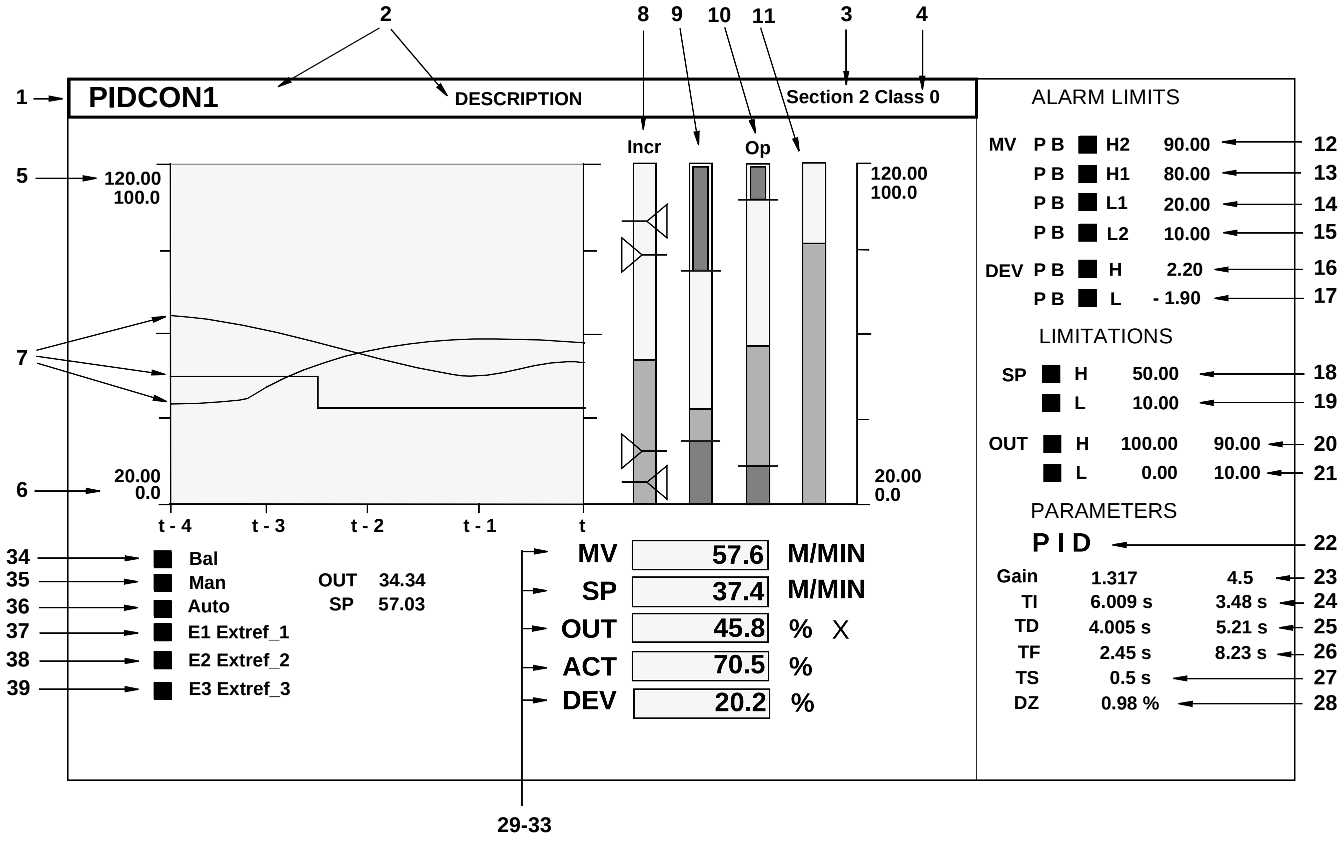
No	Description	Presentation	Condition	Remarks
19	**Setpoint Value**			*The SP object value*
19.1	**SP**	**SP** Grey		*Text in front of the value*
19.2	**SP Value**		SETP	*Setpoint value*
		Cyan	-	
19.3	**SP Unit**		UNIT	*Setpoint unit*
		Cyan	-	
20	**Output Value**			*The OUT object value*
20.1	**OUT**	**OUT** Grey		*Text in front of the value*
20.2	**OUT Value**		POUT	*Output value*
		Magenta	-	
20.3	**OUT Unit**	**%** Magenta		*Output unit*
21	**External OUT limitation**	**X** Yellow	(OUT=HL = 1 or OUT=LL= 1) and EOLIM = 1	*OUT limited by external limitation*
22	**Actuator Value**			*The ACT object value*
22.1	**ACT**	**ACT** Grey	CTRL = ON-OFF	*Text in front of the value*
22.2	**ACT Value**		ACTPOS	*Actuator value*
		Blue	CTRL = ON-OFF	
22.3	**ACT Unit**	**%** Blue	CTRL = ON-OFF	*Actuator unit*

The conditions are in priority order. Underlined parameters are configurable.

Parameters	Affects	Options (bold is default)	Remarks
NameFont	2. Header Name	**FC50**, any font	
ManModeColor	3.1 Mode	**K5** (Green), any color	

4.15.4 PIDOB01

Presentation:



Behavior**:**

No	Description	Presentation	Condition	Remarks
1	**SelectFrame**	White	SELECTED = 1	*Object select frame*
		Black	-	
2	**Header**		NAME and DESCR	*Object name and description*
		Red flashing	AL_UNACK = 1	*Unacknowledged alarm*
		Red	DISTURB = 1	*Alarm*
		Green	-	*Normal*
3	**Section**	**Section** Grey		*Text in front of the value*
		Green	PROC_SEC	*Process section*
4	**Class**	**Class** Grey		*Text in front of the value*
		Green	CLASS	*Object class*

No	Description	Presentation	Condition	Remarks
5	**MV Range Max**		MAX	*Range Max of the MV and SP value*
		Green	-	
	OUT Range Max			*Range Max of OUT is 100.0 %*
		100.0 Magenta	-	
6	**MV Range Min**		MIN	*Range Min of the MV and SP value*
		Green	-	
	OUT Range Min			*Range Min of OUT is 0.0 %*
		0.0 Magenta	-	
7	**Measure Value Trim Curve**		MV	*Object measure value*
		Green	-	
	Setpoint Value Trim Curve		SETP	*Object setpoint value*
		Cyan	-	
	Output Value Trim Curve		POUT	*Object output value*
		Magenta	-	
8.1	**Direction**	**Incr** Green	MV_DIR = INCREASING	*Increase of measured value*
		Decr Green	MV_DIR = DECREASING	*Decrease of measured value*
8.2	**Measured Value Bargraph**		MV	*Measured Value*
		Green	-	
8.3	**High Limit 2**		MVH2	*Alarm High limit 2*
	—◁	-	MVH2 >= MAX	*Invisible*
		Filled Yellow	MV>H2 = 1 and AL_F2_BLK = 1	
		Unfilled Yellow	AL_F2_BLK = 1	
		Filled Red flashing	MV>H2 = 1 and AU_MV>H2 = 1	
		Unfilled Red flashing	AU_MV>H2 = 1	
		Filled Red	MV>H2 = 1	
		Unfilled Grey	-	
8.4	**High Limit 1**		MVH1	*Warning High limit 1*
	▷—	-	MVH1 >= MAX	*Invisible*
		Filled Yellow	MV>H1 = 1 and AL_F1_BLK = 1	
		Unfilled Yellow	AL_F1_BLK = 1	
		Filled Red flashing	MV>H1 = 1 and AU_MV>H1 = 1	
		Unfilled Red flashing	AU_MV>H1 = 1	
		Filled Red	MV>H1 = 1	
		Unfilled Grey	-	

No	Description	Presentation	Condition	Remarks
8.5	**Low Limit 1**		MVL1	*Warning Low limit 1*
	▷—	-	MVL1 <= MIN	*Invisible*
		Filled Yellow	MV<L1 = 1 and AL_F1_BLK = 1	
		Unfilled Yellow	AL_F1_BLK = 1	
		Filled Red flashing	MV<L1 = 1 and AU_MV<L1 = 1	
		Unfilled Red flashing	AU_MV<L1 = 1	
		Filled Red	MV<L1 = 1	
		Unfilled Grey	-	
8.6	**Low Limit 2**		MVL2	*Alarm Low limit 2*
	—◁	-	MVL2 <= MIN	*Invisible*
		Filled Yellow	MV<L2 = 1 and AL_F2_BLK = 1	
		Unfilled Yellow	AL_F2_BLK = 1	
		Filled Red flashing	MV<L2 = 1 and AU_MV<L2 = 1	
		Unfilled Red flashing	AU_MV<L2 = 1	
		Filled Red	MV<L2 = 1	
		Unfilled Grey	-	
9.1	**SP Value Bargraph**	Cyan	SETP	*Setpoint value*
9.2	**High SP Limit**		SETPH	*Upper limit setpoint*
		Yellow	SP=HL = 1	*Limitation line and mesh*
		Grey	-	
9.3	**Low SP Limit**		SETPL	*Lower setpoint limit*
		Yellow	SP=LL = 1	*Limitation line and mesh*
		Grey	-	
10.1	**Opening or Closing**	**Op** Magenta	ACT_DIR = OPENING	*Actuator position opening*
		Cl Magenta	ACT_DIR = CLOSING	*Actuator position closing*
10.2	**OUT Value Bargraph**		POUT	*Output value*
		Magenta	-	
10.3	**HIgh OUT Limit**		OUTPH	*Upper limit output*
		-	OUTPH > 100 or (EOHL > 100 and EOLIM = 1)	*Invisible*
		Yellow	OUT=HL = 1	*Limitation line and mesh*
		Grey	-	
10.4	**Low OUT Limit**		OUTPL	*Lower limit output*
		-	OUTPL < 0 or (EOLL < 0 and EOLIM = 1)	*Invisible*
		Yellow	OUT=LL = 1	*Limitation line and mesh*
		Grey	-	

No	Description	Presentation	Condition	Remarks
11	**ACT Value Bargraph**		ACTPOS	*Actuator value*
		Blue	CTRL = ON-OFF	
12	**ALARM LIMITS**			*Alarm limits*
12.1	**MV Text**	**MV** Grey		*Text in front of the line*
12.2	**Printout blocked**	**P** Yellow	PRINT_F2_BLK = 1	*Printout blocked*
12.3	**Alarm blocked**	**B** Yellow	AL_F2_BLK = 1	*Alarm blocked by operator*
		Bx Yellow	AL_F2_P_BLK = 1	*Alarm blocked by PC-program*
12.4	**Alarm Indication**	■ Red flashing	AU_MV>H2 = 1	*Unacknowledged alarm*
		■ Red	MV>H2 = 1	*Alarm*
12.5	**H2 Text**	**H2** Grey		*Text in front of the value*
12.6	**H2 Value**	Green	MVH2	*High limit 2 value*
13.1	**Printout blocked**	**P** Yellow	PRINT_F1_BLK = 1	*Printout blocked*
13.2	**Alarm blocked**	**B** Yellow	AL_F1_BLK = 1	*Alarm blocked by operator*
		Bx Yellow	AL_F1_P_BLK = 1	*Alarm blocked by PC-program*
13.3	**Alarm Indication**	■ Red flashing	AU_MV>H1 = 1	*Unacknowledged alarm*
		■ Red	MV>H1 = 1	*Alarm*
13.4	**H1 Text**	**H1** Grey		*Text in front of the value*
13.5	**H1 Value**	Green	MVH1	*High limit 1 value*
14.1	**Printout blocked**	**P** Yellow	PRINT_F1_BLK = 1	*Printout blocked*
14.2	**Alarm blocked**	**B** Yellow	AL_F1_BLK = 1	*Alarm blocked by operator*
		Bx Yellow	AL_F1_P_BLK = 1	*Alarm blocked by PC-program*
14.3	**Alarm Indication**	■ Red flashing	AU_MV<L1 = 1	*Unacknowledged alarm*
		■ Red	MV<L1 = 1	*Alarm*
14.4	**L1 Text**	**L1** Grey		*Text in front of the value*
14.5	**L1 Value**	Green	MVL1	*Low limit 1 value*
15.1	**Printout blocked**	**P** Yellow	PRINT_F2_BLK = 1	*Printout blocked*
15.2	**Alarm blocked**	**B** Yellow	AL_F2_BLK = 1	*Alarm blocked by operator*
		Bx Yellow	AL_F2_P_BLK = 1	*Alarm blocked by PC-program*
15.3	**Alarm Indication**	■ Red flashing	AU_MV<L2 = 1	*Unacknowledged alarm*
		■ Red	MV<L2 = 1	*Alarm*
15.4	**L2 Text**	**L2** Grey		*Text in front of the value*
15.5	**L2 Value**	Green	MVL2	*Low limit 2 value*

No	Description	Presentation	Condition	Remarks
16.1	**DEV**	**DEV** Grey		
16.2	**Printout blocked**	**P** Yellow	PRINT_F1_BLK = 1	*Printout blocked*
16.3	**Alarm blocked**	**B** Yellow	AL_F1_BLK =1	*Alarm block by operator*
		Bx Yellow	AL_F1_P_BLK = 1	*Alarm blocked by PC-program*
16.4	**Alarm Indication**	■ Red flashing	AU_DEV>H1 = 1	*Unacknowledged alarm*
		■ Red	DEV>H1 = 1	*Alarm*
16.5	**H Text**	**H** Grey		*Text in front of the value*
16.6	**H Value**	Cream	DEVH1	
17.1	**Printout blocked**	**P** Yellow	PRINT_F1_BLK = 1	*Printout blocked*
17.2	**Alarm blocked**	**B** Yellow	AL_F1_BLK =1	*Alarm blocked by operator*
		Bx Yellow	AL_F1_P_BLK = 1	*Alarm blocked by PC-program*
17.3	**Alarm Indication**	■ Red flashing	AU_DEV<L1 = 1	*Unacknowledged alarm*
		■ Red	DEV<L1 = 1	*Alarm*
17.4	**L Text**	**L** Grey		*Text in front of the value*
17.5	**L Value**	Cream	DEVL1	
18	**LIMITATIONS**			*Limitations*
18.1	**SP Text**	**SP** Grey		*Setpoint*
18.2	**Warning Indication**	■ Yellow	SP=HL = 1	
18.3	**H Text**	**H** Grey		*High limit setpoint*
18.4	**H Value**	Cyan	SETPH	
19.1	**Warning Indication**	■ Yellow	SP=LL = 1	
19.2	**L Text**	**L** Grey		*Low limit setpoint*
19.3	**L Value**	Cyan	SETPL	
20.1	**OUT Text**	**OUT** Grey		*Text in front of the line*
20.2	**Warning Indication**	■ Yellow	OUT_HL = 1	
20.3	**H Text**	**H** Grey		*High limit output*
20.4	**H Value**	Grey	OUTPH, EOLIM = 1	*Output High value*
		Magenta	OUTPH, EOLIM = 0	
20.5	**External H value**	Magenta	EOLIM = 1	*External Output High value*
		Grey		
21.1	**Warning Indication**	■ Yellow	OUT_EQ_LL = 1	
21.2	**L Text**	**L** Grey		*Low limit output*
21.3	**L Value**	Grey	OUTPL, EOLIM = 1	*Output Low value*
		Magenta	OUTPL, EOLIM = 0	
21.4	**External L Value**	Magenta	EOLIM = 1	*External Output Low value*
		Grey	-	

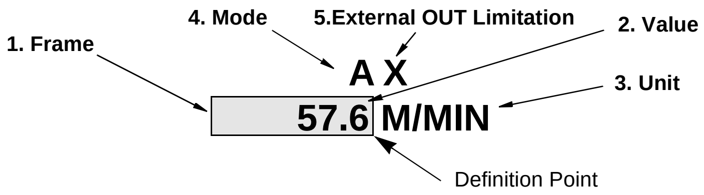
No	Description	Presentation	Condition	Remarks
22	**PARAMETERS**	Grey		
22.1	**P**	**P** Green		*Gain active*
22.2	**I**	**I** Green	BLK_I = 0 and EINTBE = 0	*Integration active*
22.3	**D**	**D** Green	BLK_D = 0 and EDERBE = 0	*Derivation active*
23.1	**Gain**	**Gain** Grey		*Gain*
23.2	**Value**	Grey	EGAINE = 1	*Value changed by operator*
		Green	GAIN	
23.3	**External Value**	Green	EGAINE = 1	
24.1	**TI**	**TI** Grey		*Integration time*
24.2	**Value**	Grey	ETIE = 1	*Value changed by operator*
		Green	TI	
24.3	**Unit**	**S** Green		
24.4	**External Value**	Green	ETIE = 1	
24.5	**External Unit**	**S** Green	ETIE = 1	
25.1	**TD**	**TD** Grey		*Derivation time*
25.2	**Value**	Grey	ETDE = 1	*Value changed by operator*
		Green	TD	
25.3	**Unit**	**S** Green		
25.4	**External Value**	Green	ETDE = 1	
25.5	**External Unit**	**S** Green	ETDE = 1	
26.1	**TF**	**TF** Grey		*Filter Time*
26.2	**Value**	Grey	ETFE = 1	*Value changed by operator*
		Green	TF	
26.3	**Unit**	**S** Green		
26.4	**External Value**	Green	ETFE = 1	
26.5	**External Unit**	**S** Green	ETFE = 1	
27.1	**TS**	**TS** Grey		*Sampling time*
27.2	**Value**	Green	TS	
27.3	**Unit**	**S** Green		
28.1	**DZ**	**DZ** Grey		*Deadzone*
28.2	**Value**	Green	DZ, CTRL = ON-OFF	
28.3	**Unit**	**%** Green	DZ, CTRL = ON-OFF	

No	Description	Presentation	Condition	Remarks
29.1	**MV Text**	**MV** Grey		*Text in front of the value*
29.2	**MV Value**	**? ? ?** Red	AI_ERR = 1	*Signal error*
			MV	*Measured value*
		Green	-	
29.3	**MV Unit**		UNIT	*Measured unit*
		Green	-	
30.1	**SP Text**	**SP** Grey		*Text in front of the value*
30.2	**SP Value**		SETP	*Setpoint value*
		Cyan	-	
30.3	**SP Unit**		UNIT	*Setpoint unit*
		Cyan	-	
31.1	**OUT Text**	**OUT** Grey		*Text in front of the value*
31.2	**OUT Value**		POUT	*Output value*
		Magenta	-	
31.3	**OUT Unit**	**%** Magenta		*Output unit*
31.4	**External OUT Limitation Indication**	**X** Yellow	(OUT=HL = 1 or OUT=LL= 1) and EOLIM = 1	*OUT limited by external limitation*
32.1	**ACT Text**	**ACT** Grey	CTRL = ON-OFF	*Text in front of the value*
32.2	**ACT Value**		ACTPOS	*Actuator value*
		Blue	CTRL = ON-OFF	
32.3	**ACT Unit**	**%** Blue	CTRL = ON-OFF	*Actuator unit*
33.1	**DEV Text**	**DEV** Grey		*Text in front of the value*
33.2	**DEV Value**		DEV	*Deviation value*
		Cream	-	
33.3	**DEV Unit**	**%** Cream		*Deviation unit*
34.1	**Bal indication**	■ Green filled	BAL = 1	*Bal control mode*
34.2	**Bal Mode**	**Bal** Green	BAL = 1	*Text behind the indication*
		Bal Grey	-	
34.3		**Local** Green	LOCAL = 1	*Bal Local control mode*

No	Description	Presentation	Condition	Remarks
35.1	**Man indication**	■ Green filled	MAN = 1	*Man control mode*
35.2	**Man Mode**	**Man** Green	MAN = 1	*Text behind the indication*
		Man Grey	-	
35.3		**Clamped** Green	CLAMP = 1	*Man Clamped control mode*
		Forced Green	MANFD = 1	*Man Forced control mode*
35.3	**Man Out Text**	**OUT** Grey		*Text in front of the value*
35.4	**Man Out Value**		MAN_OUT	*Man Out value*
		Magenta	MAN = 1	*Manual mode*
		Grey	-	
36.1	**Auto indication**	■ Green filled	AUTO = 1	*Auto control mode*
36.2	**Auto Mode**	**Auto** Green	AUTO = 1	*Text behind the indication*
		Auto Grey	-	
36.3	**Auto Setpoint Text**	**SP** Grey		*Text in front of the value*
36.4	**Auto Setpoint Value**		AUTOSP	*Auto Setpoint value*
		Cyan	AUTO =1	*Auto mode*
		Grey	-	
37.1	**E1 indication**	■ Green filled	E1 = 1	*E1 control mode*
37.2	**E1 Mode**	**E1** Green	E1 = 1	*Text behind the indication*
		E1 Grey	-	
37.2	**E1 Name**		E1NAME	*User text behind the text E1*
		Green	E1 = 1	
		Grey	-	
38.1	**E2 indication**	■ Green filled	E2 = 1	*E2 control mode*
38.2	**E2 Mode**	**E2** Green	E2 = 1	*Text behind the indication*
		E2 Grey	-	
38.2	**E2 Name**		E2NAME	*User text behind the text E2*
		Green	E2 = 1	
		Grey	-	
39.1	**E3 indication**	■ Green filled	E3 = 1	*E3 control mode*
39.2	**E3 Mode**	**E3** Green	E3 = 1	*Text behind the indication*
		E3 Grey	-	
39.2	**E3 Name**		E3NAME	*User text behind the text E3*
		Green	E3 = 1	
		Grey	-	

4.15.5 PIDPD01

Presentation:



Behavior:

No	Description	Presentation	Condition	Remarks
1	**SelectFrame**	White	SELECTED = 1	*Selected*
		Dotted Yellow	AL_F1_BLK = 1 or AL_F2_BLK = 1	*Alarm blocked by operator*
		Black	-	FrameColor
2	**Measured Value**		MV	*Object value*
		? ? ? Red flashing	AI_ERR = 1 and AL_UNACK = 1	*Unacknowledged signal error*
		Red flashing	AL_UNACK = 1	*Unacknowledged alarm*
		? ? ? Red	AI_ERR = 1	*Signal error*
		Red	DISTURB = 1	*Alarm*
		Green	-	NormalColor
3	**Unit**		UnitVisible = onRequest	*Object unit*
		Green	UNIT	NormalColor
		-	UnitVisible = noSubscription	*Unit is invisible*
4	**Mode**		ModeVisible = true	*Object mode*
		BaLo Green	LOCAL = 1	*Bal Local mode* ModeColor
		Bal Green	BAL = 1	*Bal mode* BalModeColor
		MCp Green	CLAMPED = 1	*Man Clamped mode* ManModeColor
		MFd Green	MANFD = 1	*Man Forced mode* ManModeColor
		M Green	MAN = 1	*Man mode* ManModeColor
		A Green	AUTO = 1	*Auto mode* AutoModeColor
		E1 Green	E1 = 1	*E1 mode* E1ModeColor
		E2 Green	E2 = 1	*E2 mode* E2ModeColor
		E3 Green	E3 = 1	*E3 mode* E3ModeColor
		-	ModeVisible = false	*Mode is invisible*

No	Description	Presentation	Condition	Remarks
5	**External OUT Limitation**		InterlockVisible = true	*External output limitation*
		X Yellow	(OUT=HL = 1 or OUT=LL= 1) and EOLIM = 1	*External output limitation* InterlockColor
		-	InterlockVisible = false	*External limitation is invisible*

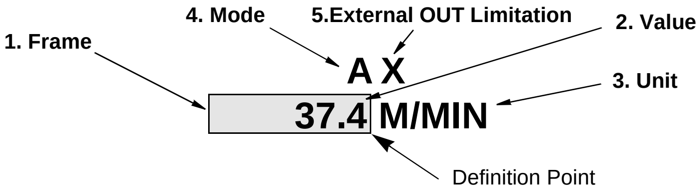
The conditions are in priority order. Underlined parameters are configurable.

Configuration:

Parameters	Affects	Options (bold is default)	Remarks
ModeVisible	4. Mode	**true**, false	
InterlockVisible	5. External OUT Limitation	**true**, false	
UnitVisible	3. Unit	**onRequest**, noSubscription	
NormalColor	2. Measured Value	**K5** (Green), any color	
ModeColor	4. Mode	**K5** (Green), any color	
ManModeColor	4. Mode	**K5** (Green), any color	
AutoModeColor	4. Mode	**K5** (Green), any color	
E1ModeColor	4. Mode	**K5** (Green), any color	
E2ModeColor	4. Mode	**K5** (Green), any color	
E3ModeColor	4. Mode	**K5** (Green), any color	
BalModeColor	4. Mode	**K5** (Green), any color	
InterlockColor	5. External OUT Limitation	**K3** (Yellow), any color	
SelectAreaColor	1. SelectArea	**K16** (Black), any color	
Font	2. Measured Value and 3. Unit	**FA40**, any font	
FrameColor	1. SelectFrame	**K16** (Black), any color	
FrameWidth	1. SelectFrame	**2**, (1..4)	
NumberOfChar	2. Measured Value	**7**	*Including* **.** *and* **-**
UseDisplayColor	4. Mode	**false**, true	*true if DisplayColor used*
DisplayColor	4. Mode	**N13** (Black), any color	*Bg for Mode if UseDisplayColor is true*

4.15.6 PIDPD02

Presentation:



Behavior:

No	Description	Presentation	Condition	Remarks
1	**SelectFrame**	White	SELECTED = 1	*Selected*
		Dotted Yellow	AL_F1_BLK = 1 or AL_F2_BLK = 1	*Alarm blocked by operator*
		Black	-	FrameColor
2	**Setpoint Value**		SETP	*Setpoint value*
		Red flashing	AL_UNACK = 1	
		Red	DISTURB = 1	
		Cyan	-	NormalColor
3	**Unit**		UnitVisible = onRequest	*Object unit*
		Cyan	UNIT	NormalColor
		-	UnitVisible = noSubscription	*Unit is invisible*
4	**Mode**		ModeVisible = true	*Object mode*
		BaLo Green	LOCAL = 1	*Bal Local mode* ModeColor
		Bal Green	BAL = 1	*Bal mode* BalModeColor
		MCp Green	CLAMPED = 1	*Man Clamped mode* ManModeColor
		MFd Green	MANFD = 1	*Man Forced mode* ManModeColor
		M Green	MAN = 1	*Man mode* ManModeColor
		A Green	AUTO = 1	*Auto mode* AutoModeColor
		E1 Green	E1 = 1	*E1 mode* E1ModeColor
		E2 Green	E2 = 1	*E2 mode* E2ModeColor
		E3 Green	E3 = 1	*E3 mode* E3ModeColor
		-	ModeVisible = false	*Mode is invisible*

No	Description	Presentation	Condition	Remarks
5	**External OUT Limitation**		InterlockVisible = true	*External output limitation*
		X Yellow	(OUT=HL = 1 or OUT=LL= 1) and EOLIM = 1	*External output limitation* InterlockColor
		-	InterlockVisible = false	*External limitation is invisible*

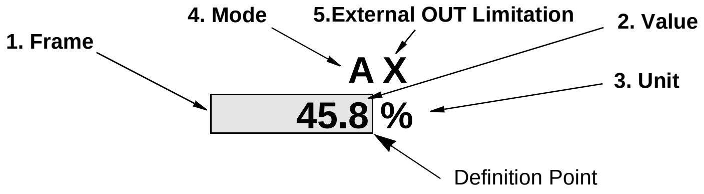
The conditions are in priority order. Underlined parameters are configurable.

Configuration:

Parameters	Affects	Options (bold is default)	Remarks
ModeVisible	4. Mode	**true**, false	
InterlockVisible	5. External OUT Limitation	**true**, false	
UnitVisible	3. Unit	**onRequest**, noSubscription	
NormalColor	2. Setpoint Value	**K9** (Cyan), any color	
ModeColor	4. Mode	**K5** (Green), any color	
ManModeColor	4. Mode	**K5** (Green), any color	
AutoModeColor	4. Mode	**K5** (Green), any color	
E1ModeColor	4. Mode	**K5** (Green), any color	
E2ModeColor	4. Mode	**K5** (Green), any color	
E3ModeColor	4. Mode	**K5** (Green), any color	
BalModeColor	4. Mode	**K5** (Green), any color	
InterlockColor	5. External OUT Limitation	**K3** (Yellow), any color	
SelectAreaColor	1. SelectArea	**K16** (Black), any color	
Font	2. Setpoint Value and 3. Unit	**FA40**, any font	
FrameColor	1. SelectFrame	**K16** (Black), any color	
FrameWidth	1. SelectFrame	**2**, (1..4)	
NumberOfChar	2. Setpoint Value	**7**	*Including **.** and **-***
UseDisplayColor	4. Mode	**false**, true	*true if DisplayColor used*
DisplayColor	4. Mode	**N13** (Black), any color	*Bg for Mode if UseDisplayColor is true*

4.15.7 PIDPD03

Presentation:



Behavior:

No	Description	Presentation	Condition	Remarks
1	**SelectFrame**	White	SELECTED = 1	*Selected*
		Dotted Yellow	AL_F1_BLK = 1 or AL_F2_BLK = 1	*Alarm blocked by operator*
		Black	-	FrameColor
2	**Output Value**		OUT	*Output value*
		Red flashing	AL_UNACK = 1	
		Red	DISTURB = 1	
		Magenta	-	NormalColor
3	**Unit**			*Object unit*
		% Magenta	-	NormalColor
4	**Mode**		ModeVisible = true	*Object mode*
		BaLo Green	LOCAL = 1	*Bal Local mode* ModeColor
		Bal Green	BAL = 1	*Bal mode* BalModeColor
		MCp Green	CLAMPED = 1	*Man Clamped mode* ManModeColor
		MFd Green	MANFD = 1	*Man Forced mode* ManModeColor
		M Green	MAN = 1	*Man mode* ManModeColor
		A Green	AUTO = 1	*Auto mode* AutoModeColor
		E1 Green	E1 = 1	*E1 mode* E1ModeColor
		E2 Green	E2 = 1	*E2 mode* E2ModeColor
		E3 Green	E3 = 1	*E3 mode* E3ModeColor
		-	ModeVisible = false	*Mode is invisible*

No	Description	Presentation	Condition	Remarks
5	**External OUT Limitation**		InterlockVisible = true	*External output limitation*
		X Yellow	(OUT=HL = 1 or OUT=LL= 1) and EOLIM = 1	*External output limitation* InterlockColor
		-	InterlockVisible = false	*External limitation is invisible*

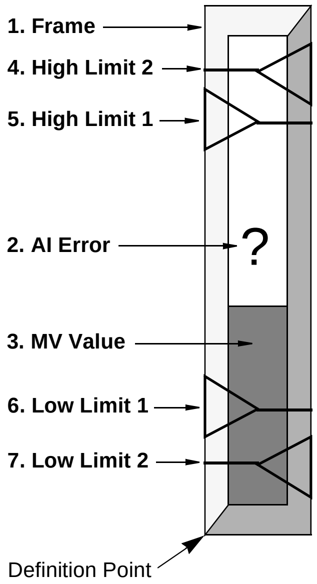
The conditions are in priority order. Underlined parameters are configurable.

Configuration:

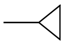
Parameters	Affects	Options (bold is default)	Remarks
ModeVisible	4. Mode	**false**, true	
InterlockVisible	5. External OUT Limitation	**false**, true	
Unit	3. Unit	**%**, user defined unit	
NumberOfDec	2. Output Value	**1**	
NormalColor	2. Output Value	**K11** (Magenta), any color	
ModeColor	4. Mode	**K5** (Green), any color	
ManModeColor	4. Mode	**K5** (Green), any color	
AutoModeColor	4. Mode	**K5** (Green), any color	
E1ModeColor	4. Mode	**K5** (Green), any color	
E2ModeColor	4. Mode	**K5** (Green), any color	
E3ModeColor	4. Mode	**K5** (Green), any color	
BalModeColor	4. Mode	**K5** (Green), any color	
InterlockColor	5. External OUT Limitation	**K3** (Yellow), any color	
SelectAreaColor	1. SelectArea	**K16** (Black), any color	
Font	2. Output Value and 3. Unit	**FA40**, any font	
FrameColor	1. SelectFrame	**K16** (Black), any color	
FrameWidth	1. SelectFrame	**2**, (1..4)	
NumberOfChar	2. Output Value	**7**	*Including* **.** *and* **-**
UseDisplayColor	4. Mode	**false**, true	*true if DisplayColor used*
DisplayColor	4. Mode	**N13** (Black), any color	*Bg for Mode if UseDisplayColor is true*

4.15.8 PIDPD51

Presentation:



Behavior:

No	Description	Presentation	Condition	Remarks
1.1	**SelectFrame**	White	SELECTED = 1	*Object frame*
		Black	-	FrameColor
1.2	**TopLeftEdge**			*Three Dimensions effect*
		Grey		TopLeftColor
1.3	**BottomRightEdge**			*Three Dimensions effect*
		Grey		BottomRightColor
2	**AI Error**	**?** Red flashing	AI_ERR = 1 and AL_UNACK = 1	*Unacknowledged signal error*
		? Red	AI_ERR = 1	*AI error alarm*
3	**MV Value**		MV	*Object value*
		-	AI_ERR = 1	*Invisible - I/O Error*
		Red flashing	AL_UNACK = 1	*Unacknowledged alarm*
		Red	DISTURB =1	*Alarm*
		Green	-	NormalColor
4	**High Limit 2**		MVH2	*Alarm High limit 2*
		-	MVH2 > MAX	*Invisible*
		Filled Yellow	MV>H2 = 1 and AL_F2_BLK = 1	
		Unfilled Yellow	AL_F2_BLK = 1	
		Filled Red flashing	MV>H2 = 1 and AU_MV>H2 = 1	
		Unfilled Red flashing	AU_MV>H2 = 1	
		Filled Red	MV>H2 = 1	
		Unfilled Grey	-	LimitColor

No	Description	Presentation	Condition	Remarks
5	**High Limit 1**		MVH1	*Warning High limit 1*
	▷—	-	MVH1 > MAX	*Invisible*
		Filled Yellow	MV>H1 = 1 and AL_F1_BLK = 1	
		Unfilled Yellow	AL_F1_BLK = 1	
		Filled Red flashing	MV>H1 = 1 and AU_MV>H1 = 1	
		Unfilled Red flashing	AU_MV>H1 = 1	
		Filled Red	MV>H1 = 1	
		Unfilled Grey	-	LimitColor
6	**Low Limit 1**		MVL1	*Warning Low limit 1*
	▷—	-	MVL1 < MIN	*Invisible*
		Filled Yellow	MV<L1 = 1 and AL_F1_BLK = 1	
		Unfilled Yellow	AL_F1_BLK = 1	
		Filled Red flashing	MV<L1 = 1 and AU_MV<L1 = 1	
		Unfilled Red flashing	AU_MV<L1 = 1	
		Filled Red	MV<L1 = 1	
		Unfilled Grey	-	LimitColor
7	**Low Limit 2**		MVL2	*Alarm Low limit 2*
	—◁	-	MVL2 < MIN	*Invisible*
		Filled Yellow	MV<L2 = 1 and AL_F2_BLK = 1	
		Unfilled Yellow	AL_F2_BLK = 1	
		Filled Red flashing	MV<L2 = 1 and AU_MV<L2 = 1	
		Unfilled Red flashing	AU_MV<L2 = 1	
		Filled Red	MV<L2 = 1	
		Unfilled Grey	-	LimitColor

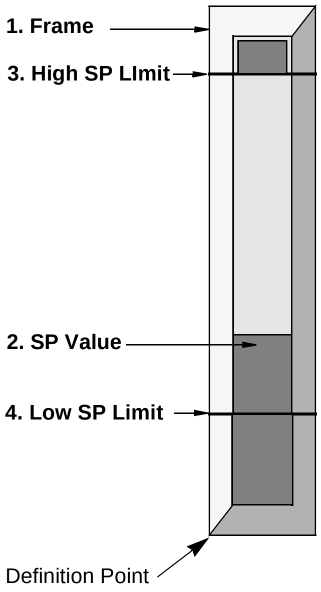
The conditions are in priority order. Underlined parameters are configurable.

Configuration:

Parameters	Affects	Options (bold is default)	Remarks
NormalColor	3. MV Value	**K5** (Green), any color	
TopLeftColor	1.2 TopLeftEdge	**N13** (Black), any color	*Regarding the choice of the color it will be three dimension effect*
BottomRightColor	1.3 BottomRightEdge	**N13** (Black), any color	
FrameColor	1.1 SelectFrame	**K16** (Black), any color	
FrameWidth	1.1 SelectFrame	**2, (1..4)**	
BarBackColor	3. MV Value	**K16** (Black), any color	*Background color of the bargraph*
LimitColor	4. High Limit 2, 5. High Limit 1, 6. Low Limit 1 and 7. Low Limit 2	**M16** (Grey), any color	

4.15.9 PIDPD52

Presentation:



Behavior:

No	Description	Presentation	Condition	Remarks
1.1	**SelectFrame**	White	SELECTED = 1	*Object frame*
		Black	-	FrameColor
1.2	**TopLeftEdge**			*Three Dimensions effect*
		Grey	-	TopLeftColor
1.3	**BottomRightEdge**			*Three Dimensions effect*
		Grey	-	BottomRightColor
2	**Setpoint Value**		SETP	*Object setpoint value*
		Red flashing	AL_UNACK = 1	*Unacknowledged alarm*
		Red	DISTURB = 1	*Alarm*
		Cyan	-	NormalColor
3	**High SP Limit**		SETPH	*Upper limit setpoint*
		Yellow	SP=HL = 1	*Limitation line and mesh*
		Grey	-	LimitColor
4	**Low SP Limit**		SETPH	*Lower limit setpoint*
		Yellow	SP=HL = 1	*Limitation line and mesh*
		Grey	-	LimitColor

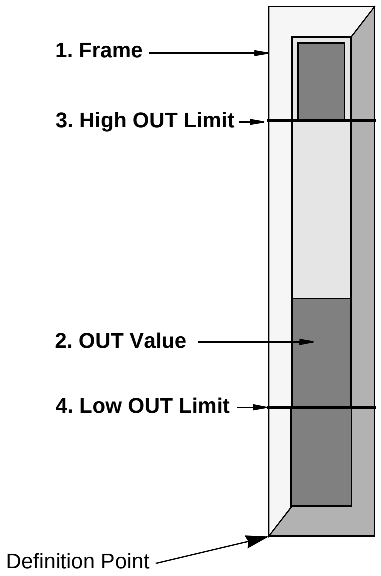
The conditions are in priority order. Underlined parameters are configurable.

Configuration:

Parameters	**Affects**	**Options (bold is default)**	**Remarks**
NormalColor	2. Setpoint Value	**K9** (Cyan), any color	
TopLeftColor	1.2 TopLeftEdge	**N13** (Black), any color	*Regarding the choice of the color it will be three dimension effect*
BottomRightColor	1.3 BottomRightEdge	**N13** (Black), any color	
FrameColor	1.3 SelectFrame	**K16** (Black), any color	
FrameWidth	1.1 SelectFrame	**2**, (1..4)	
BarBackColor	2. Setpoint Value	**K16** (Black), any color	*Background color of the bargraph*
LimitColor	3. High SP Limit and 4. Low SP Limit	**M16** (Grey), any color	

4.15.10 PIDPD53

Presentation:



Behavior:

No	Description	Presentation	Condition	Remarks
1.1	**SelectFrame**	White	SELECTED = 1	*Object frame*
		Black	-	FrameColor
1.2	**TopLeftEdge**			*Three Dimensions effect*
		Grey	-	TopLeftColor
1.3	**BottomRightEdge**			*Three Dimensions effect*
		Grey	-	BottomRightColor
2	**Output Value**		POUT	*Output value*
		Red flashing	AL_UNACK = 1	
		Red	DISTURB = 1	
		Magenta	-	NormalColor
3	**HIgh OUT Limit**		OUTPH	*Upper limit output*
		-	OUTPH > RangeMax or (EOHL > RangeMax and EOLIM = 1)	*Invisible*
		Yellow	OUT=HL = 1	*Limitation line and mesh*
		Grey	-	LimitColor

No	Description	Presentation	Condition	Remarks
4	**Low OUT Limit**		OUTPL	*Lower limit output*
		-	OUTPL < RangeMin or (EOLL < RangeMin and EOLIM = 1)	*Invisible*
		Yellow	OUT=LL = 1	*Limitation line and mesh*
		Grey	-	LimitColor

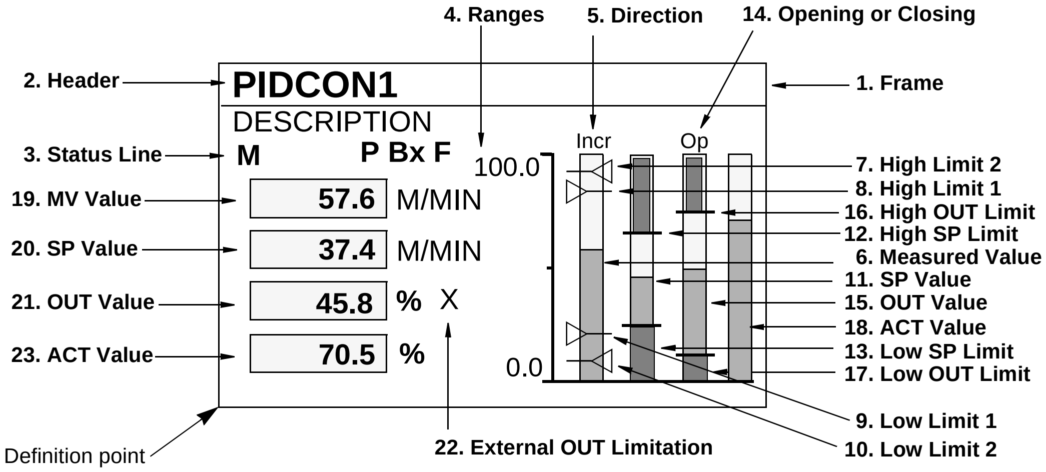
The conditions are in priority order. Underlined parameters are configurable.

Configuration:

Parameters	Affects	Options (bold is default)	Remarks
NormalColor	2. Output Value	**K11** (Magenta), any color	
TopLeftColor	1.2 TopLeftEdge	**N13** (Black), any color	*Regarding the choice of the color*
BottomRightColor	1.3 BottomRightEdge	**N13** (Black), any color	*it will be three dimension effect*
FrameColor	1.1 SelectFrame	**K16** (Black), any color	
FrameWidth	1.1 SelectFrame	**2**, (1..4)	
BarBackColor	2. Output Value	**K16** (Black), any color	*Background color of the bargraph*
LimitColor	3. High OUT Limit and 4. Low OUT Limit	**M16** (Grey), any color	
RangeMax	3. High OUT Limit	**100**	
RangeMin	4. Low OUT Limit	**0**	

4.15.11 PIDWI01

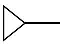
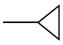
Presentation:



Behavior:

No	Description	Presentation	Condition	Remarks
1	**Select Frame**			*Object select frame*
		White	SELECTED = 1	*Only for overlap*
		Black	-	
2	**Header**		NAME and DESCR	*Object name and description*
		Red flashing	AL_UNACK = 1	*Unacknowledged alarm*
		Red	DISTURB = 1	*Alarm*
		Green	-	*Normal*
3	**Status Line**			*Status Line*
3.1	**Mode**	**BaLo** Green	LOCAL = 1	*Bal Local mode*
		Bal Green	BAL = 1	*Bal mode*
		MCp Green	CLAMP = 1	*Man Clamped mode*
		MFd Green	MANFD = 1	*Man Forced mode*
		M Green	MAN = 1	*Man mode*
		A Green	AUTO = 1	*Auto mode*
		E1 Green	E1 = 1	*E1 mode*
		E2 Green	E2 =1	*E2 mode*
		E3 Green	E3 =1	*E3 mode*

No	Description	Presentation	Condition	Remarks
3.2	**Printout Blocked**	**P** Yellow	PRINT_F1_BLK = 1 or PRINT_F2_BLK = 1	*Printout of alarm blocked*
3.3	**Alarm Blocked**	**B** Yellow	AL_F1_BLK = 1 or AL_F2_BLK = 1	*Alarm blocked by operator*
		Bx Yellow	AL_F1_P_BLK = 1 or AL_F2_P_BLK = 1	*Alarm blocked by PC*
3.4	**Alarm Indication**	**F** Red	DISTURB = 1	*Alarm*
4.1	**Range Max**	Green	MAX	*Range Max of the MV and SP values*
4.2	**Range Min**	Green	MIN	*Range Min of the MV and SP values*
5	**Direction**	**Incr** Green	MV_DIR = INCREASING	*Increase of measured value*
		Decr Green	MV_DIR = DECREASING	*Decrease of measured value*
6	**Measured Value**		MV	*Measured value*
		Green	-	
7	**High Limit 2**		MVH2	*Alarm High limit 2*
	—◁	-	MVH2 > MAX	*Invisible*
		Filled Yellow	MV>H2 = 1 and AL_F2_BLK = 1	
		Unfilled Yellow	AL_F2_BLK = 1	
		Filled Red flashing	MV>H2 = 1 and AU_MV>H2 = 1	
		Unfilled Red flashing	AU_MV>H2 = 1	
		Filled Red	MV>H2 = 1	
		Unfilled Grey	-	
8	**High Limit 1**		MVH1	*Warning High limit 1*
	▷—	-	MVH1 > MAX	*Invisible*
		Filled Yellow	MV>H1 = 1 and AL_F1_BLK = 1	
		Unfilled Yellow	AL_F1_BLK = 1	
		Filled Red flashing	MV>H1 = 1 and AU_MV>H1 = 1	
		Unfilled Red flashing	AU_MV>H1 = 1	
		Filled Red	MV>H1 = 1	
		Unfilled Grey	-	

No	Description	Presentation	Condition	Remarks
9	**Low Limit 1**		MVL1	*Warning Low limit 1*
		-	MVL1 < MIN	*Invisible*
		Filled Yellow	MV<L1 = 1 and AL_F1_BLK = 1	
		Unfilled Yellow	AL_F1_BLK = 1	
		Filled Red flashing	MV<L1 = 1 and AU_MV<L1 = 1	
		Unfilled Red flashing	AU_MV<L1 = 1	
		Filled Red	MV<L1 = 1	
		Unfilled Grey	-	
10	**Low Limit 2**		MVL2	*Alarm Low limit 2*
		-	MVL2 < MIN	*Invisible*
		Filled Yellow	MV<L2 = 1 and AL_F2_BLK = 1	
		Unfilled Yellow	AL_F2_BLK = 1	
		Filled Red flashing	MV<L2 = 1 and AU_MV<L2 = 1	
		Unfilled Red flashing	AU_MV<L2 = 1	
		Filled Red	MV<L2 = 1	
		Unfilled Grey	-	
11	**SP Value Bargraph**		SETP	*Setpoint value*
		Grey	-	
12	**High SP Limit**		SETPH	*Upper limit setpoint*
		Yellow	SP=HL = 1	*Limitation line and mesh*
		Grey	-	
13	**Low SP Limit**		SETPL	*Lower limit setpoint*
		Yellow	SP=LL = 1	*Limitation line and mesh*
		Grey	-	
14	**Opening or Closing**	**Op** Magenta	ACT_DIR = OPENING	*Actuator position opening*
		Cl Magenta	ACT_DIR = CLOSING	*Actuator position closing*

No	Description	Presentation	Condition	Remarks
15	**OUT Value Bargraph**		POUT	*Output Value*
		Magenta	-	
16	**HIgh OUT Limit**		OUTPH	*Upper limit output*
		-	OUTPH > 100 or (EOHL > 100 and EOLIM = 1)	*Invisible*
		Yellow	OUT=HL = 1	*Limitation line and mesh*
		Grey	-	
17	**Low OUT Limit**		OUTPL	*Lower limit output*
		-	OUTPL < 0 or (EOLL < 0 and EOLIM = 1)	*Invisible*
		Yellow	OUT=LL = 1	*Limitation line and mesh*
		Grey	-	
18	**ACT Value Bargraph**		ACTPOS	*Actuator value*
		Blue	CTRL = ON-OFF	
19	**Measured Value**			*The MV object value*
19.1	**MV Value**	**? ? ?** Red	AI_ERR = 1	*AI Error*
			MV	*Measured value*
		Green	-	
19.2	**MV Unit**		UNIT	*Measured unit*
		Green	-	
20	**Setpoint Value**			*The SP object value*
20.1	**SP Value**		SETP	*Setpoint value*
		Cyan	-	
20.2	**SP Unit**		UNIT	*Setpoint unit*
		Cyan	-	
21	**Output Value**			*The OUT object value*
21.1	**OUT Value**		POUT	*Output value*
		Magenta	-	
21.2	**OUT Unit**	**%** Magenta		*Output unit*
22	**External OUT limitation**	**X** Yellow	(OUT=HL = 1 or OUT=LL= 1) and EOLIM = 1	*OUT limited by external limitation*
23	**Actuator Value**			*The ACT object value*
23.1	**ACT Value**		ACTPOS	*Actuator value*
		Blue	CTRL = ON-OFF	
23.2	**ACT Unit**	**%** Blue	CTRL = ON-OFF	*Actuator unit*

4.16 Process Dialog for Ratio Station RATIOSTN

4.16.1 MIN Dialog (No authority key)

4.16.1.1 Keyboard keys

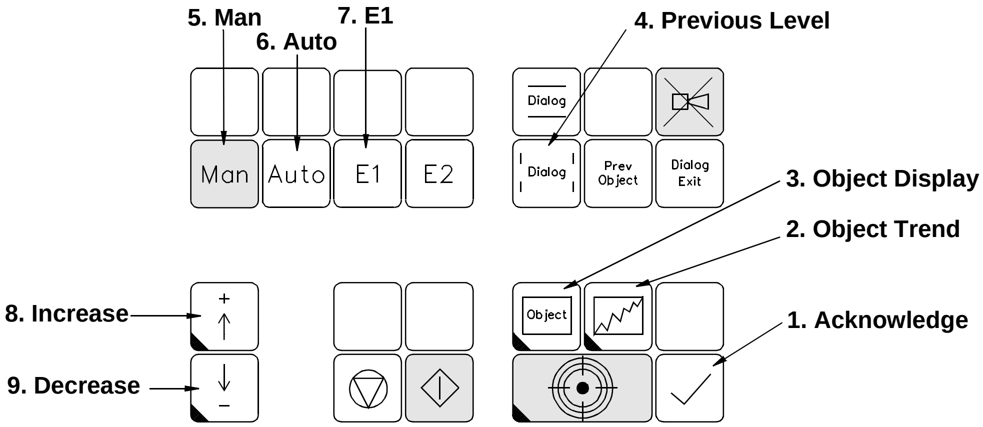


Figure 4-101. Keyboard keys

Key 1: Acknowledge	Perform: Acknowledge	AL_UNACK = 0
Key 2: Object Trend	Select: Object Trend	
Key 3: Object Display	Select: Object Display	
Key 4: Previous Level	Select Dynamic keys: Top Level	
Key 5: Man	Perform: Set to manual mode	MMI_MAN = 1 / MAN = 1
Key 6: Auto	Perform: Set to automatic mode	MMI_AUTO = 1 / AUTO = 1/
Key 7: E1	Perform: Set to external1 mode	MMI_E1 = 1 / E1 = 1
Key 8: Increase	Perform: Increase output value with 0.5 if MAN = 1 Increase ratio value with 0.5	MANOUT RATIO
Key 8: Shift + Increase	Perform: Increase output value with 5.0 if MAN = 1 Increase ratio value with 5.0	MANOUT RATIO
Key 9: Decrease	Perform: Decrease output value with 0.5 if MAN = 1 Decrease ratio value with 0.5	MANOUT RATIO
Key 9: Shift + Decrease	Perform: Decrease output value with 5.0 if MAN = 1 Decrease ratio value with 5.0	MANOUT RATIO

4.16.1.2 Dynamic keys, Top Level

D1	D2	D3	D4	D5
D6 OUT	D7 RAT	D8	D9	D10 Keyboard...

Figure 4-102. Dynamic keys

D6: OUT	Pressed: Dialog for changing Output value, value magenta	MANOUT
D7: RAT	Pressed: Dialog for changing Ratio value, value cyan	RATIO
D10: Keyboard...	Select Dynamic keys: Keyboard	

4.16.1.3 Dynamic keys, Keyboard

D1 ↑ Increase	D2 Man	D3 Auto	D4 E1	D5
D6 ↓ Decrease	D7 Acknowledge	D8 Object Display	D9 Object Trend	D10

Figure 4-103. Dynamic keys

D1: Increase	Perform: Increase output value with 0.5 if MAN = 1 Increase ratio value with 0.5	MANOUT RATIO
D2: Man	Perform: Set to manual mode	MMI_MAN = 1 / MAN = 1
D3: Auto	Perform: Set to automatic mode	MMI_AUTO = 1 / AUTO = 1
D4: E1	Perform: Set to external1 mode	MMI_E1 = 1 / E1 = 1
D6: Decrease	Perform: Decrease output value with 0.5 if MAN = 1 Decrease ratio value with 0.5	MANOUT RATIO
D7: Acknowledge	Perform: Acknowledge	AL_UNACK = 0
D8: Object Display	Select: Object Display	
D9: Object Trend	Select: Object Trend	

4.16.2 MAX Dialog (Authority key)

4.16.2.1 Keyboard keys

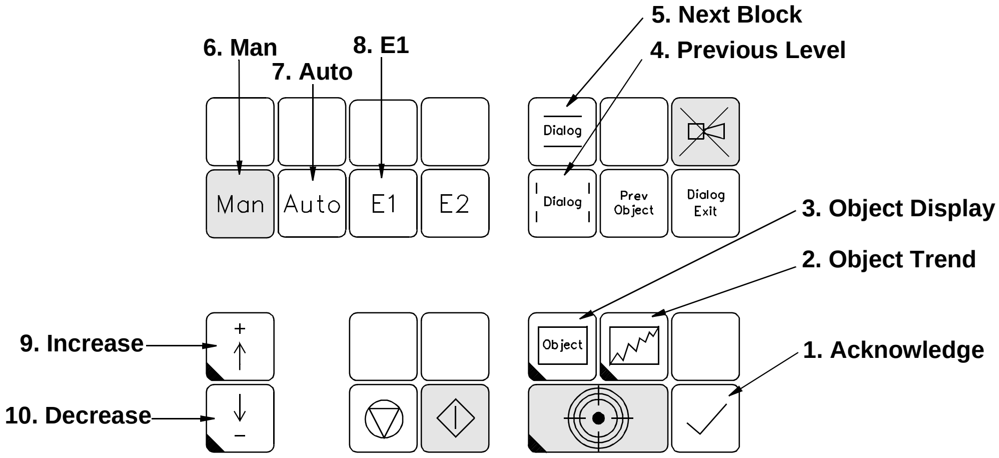


Figure 4-104. Keyboard keys

Key 1: Acknowledge	Perform: Acknowledge	AL_UNACK = 0
Key 2: Object Trend	Select: Object Trend	
Key 3: Object Display	Select: Object Display	
Key 4: Previous Level	Select Dynamic keys: Top Level	
Key 5: Next Block	Page between the dynamic key sets: Block, Limits and Keyboard	
Key 6: Man	Perform: Set to manual mode	MMI_MAN = 1 / MAN = 1
Key 7: Auto	Perform: Set to automatic mode	MMI_AUTO = 1 / AUTO = 1/
Key 8: E1	Perform: Set to external1 mode	MMI_E1 = 1 / E1 = 1
Key 9: Increase	Perform: Increase output value with 0.5 if MAN = 1 Increase ratio value with 0.5	MANOUT RATIO
Key 9: Shift + Increase	Perform: Increase output value with 5.0 if MAN = 1 Increase ratio value with 5.0	MANOUT RATIO
Key 10: Decrease	Perform: Decrease output value with 0.5 if MAN = 1 Decrease ratio value with 0.5	MANOUT RATIO
Key 10: Shift + Decrease	Perform: Decrease output value with 5.0 if MAN = 1 Decrease ratio value with 5.0	MANOUT RATIO

4.16.2.2 Dynamic keys, Top Level

D1	D2	D3	D4 Block...	D5 Limits...
D6 OUT	D7 RAT	D8 BIAS	D9	D10 Keyboard...

Figure 4-105. Dynamic keys

D4: Block...	Select Dynamic keys: Block	
D5: Limits...	Select Dynamic keys: Limits	
D6: OUT	Pressed: Dialog for changing Output value, value magenta	MANOUT
D7: RAT	Pressed: Dialog for changing Ratio value, value cyan	RATIO
D7: BIAS	Pressed: Dialog for changing BIAS value, value blue	BIAS
D10: Keyboard...	Select Dynamic keys: Keyboard	

4.16.2.3 Dynamic keys, Keyboard

D1 ↑ Increase	D2 Man	D3 Auto	D4 E1	D5
D6 ↓ Decrease	D7 Acknowledge	D8 Object Display	D9 Object Trend	D10

Figure 4-106. Dynamic keys

D1: Increase	Perform: Increase output value with 0.5 if MAN = 1	MANOUT
	Increase ratio value with 0.5	RATIO
D2: Man	Perform: Set to manual mode	MMI_MAN = 1 / MAN = 1
D3: Auto	Perform: Set to automatic mode	MMI_AUTO = 1 / AUTO = 1
D4: E1	Perform: Set to external1 mode	MMI_E1 = 1 / E1 = 1
D6: Decrease	Perform: Decrease output value with 0.5 if MAN = 1	MANOUT
	Decrease ratio value with 0.5	RATIO
D7: Acknowledge	Perform: Acknowledge	AL_UNACK = 0
D8: Object Display	Select: Object Display	
D9: Object Trend	Select: Object Trend	

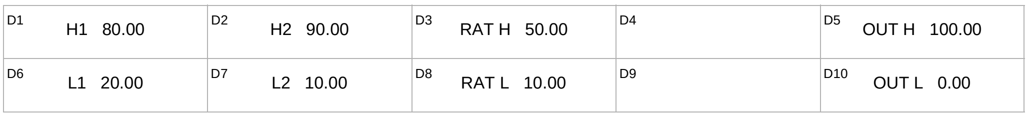
4.16.2.4 Dynamic keys, Block

D1 Block Alarm 1	D2 Block Printout 1	D3	D4 Block Alarm 2	D5 Block Printout 2
D6 Deblock Alarm 1	D7 Deblock Printout 1	D8	D9 Deblock Alarm 2	D10 Deblock Printout 2

Figure 4-107. Dynamic keys

D1: Block Alarm 1	Pressed: yellow text Released: white text	AL_F1_BLK = 1
D2: Block Printout 1	Pressed: yellow text Released: white text	PRINT_F1_BLK = 1
D4: Block Alarm 2	Pressed: yellow text Released: white text	AL_F2_BLK = 1
D5: Block Printout 2	Pressed: yellow text Released: white text	PRINT_F2_BLK = 1
D6: Deblock Alarm 1	Pressed: green text Released: white text	AL_F1_BLK = 0
D7: Deblock Printout 1	Pressed: green text Released: white text	PRINT_F1_BLK = 0
D9: Deblock Alarm 2	Pressed: green text Released: white text	AL_F2_BLK = 0
D10: Deblock Printout 2	Pressed: green text Released: white text	PRINT_F2_BLK = 0

4.16.2.5 Dynamic keys, Limits



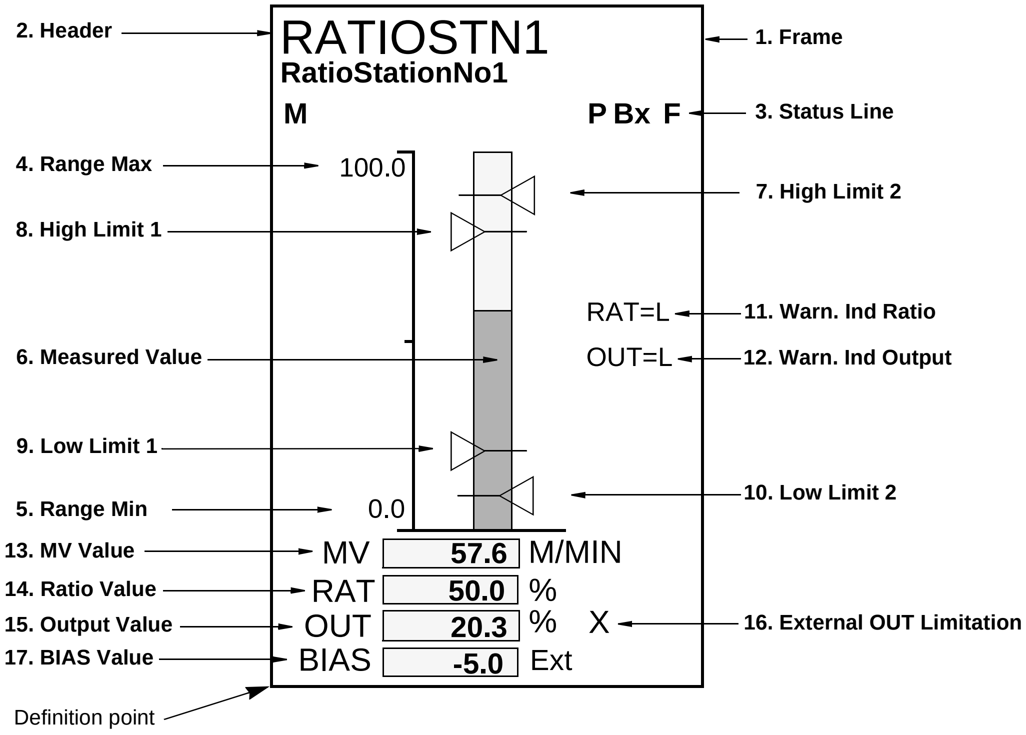
D1 H1 80.00	D2 H2 90.00	D3 RAT H 50.00	D4	D5 OUT H 100.00
D6 L1 20.00	D7 L2 10.00	D8 RAT L 10.00	D9	D10 OUT L 0.00

Figure 4-108. Dynamic keys

D1: H1	Pressed: Dialog for changing High Limit 1, value green	MVH1
D2: H2	Pressed: Dialog for changing High Limit 2, value green	MVH2
D3: RATH	Pressed: Dialog for changing Setpoint High, value cyan	RATIOH
D5: OUT H	Pressed: Dialog for changing Output High, value magenta	OUTPH
D6: L1	Pressed: Dialog for changing Low Limit 1, value green	MVL1
D7: L2	Pressed: Dialog for changing Low Limit 2, value green	MVL2
D8: RATL	Pressed: Dialog for changing Setpoint Low, value cyan	RATIOL
D10: OUT L	Pressed: Dialog for changing Output Low, value magenta	OUTPL

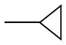
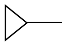
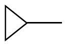
4.16.3 RATGR01

Presentation:



Behavior:

No	Description	Presentation	Condition	Remarks
1	**SelectFrame**	White	SELECTED = 1	*Object select frame*
		Black	-	
2	**Header**		NAME and DESCR	*Object name and description*
		Red flashing	AL_UNACK = 1	*Unacknowledged alarm*
		Red	DISTURB = 1	*Alarm*
		Green	-	*Normal*
3	**Status Line**			*Status Line*
3.1	**Mode**	**M** Green	MAN = 1	*Manual mode* ManModeColor
		A Green	AUTO = 1	*Auto mode*
		E1 Green	E1 = 1	*E1 mode*
3.2	**Printout Blocked**	**P** Yellow	PRINT_F1_BLK = 1 or PRINT_F2_BLK = 1	*Printout blocked*
3.3	**Alarm Blocked**	**B** Yellow	AL_F1_BLK = 1 or AL_F2_BLK = 1	*Alarm blocked by operator*
		Bx Yellow	AL_F1_P_BLK = 1 or AL_F2_P_BLK = 1	*Alarm blocked by PC-program*
3.4	**Alarm Indication**	**F** Red	DISTURB = 1	*Alarm*

No	Description	Presentation	Condition	Remarks
4	**Range Max**		MAX	*Range Max of the MV value*
		Green	-	
5	**Range Min**		MIN	*Range Min of the MV value*
		Green	-	
6	**Measured Value Bargraph**		MV	*Object value*
		Green	-	
7	**High Limit 2**		MVH2	*Alarm High limit 2*
		-	MVH2 >= MAX	*Invisible*
		Filled Yellow	MV>H2 = 1 and AL_F2_BLK = 1	
		Unfilled Yellow	AL_F2_BLK = 1	
		Filled Red flashing	MV>H2 = 1 and AU_MV>H2 = 1	
		Unfilled Red flashing	AU_MV>H2 = 1	
		Filled Red	MV>H2 = 1	
		Unfilled Grey	-	
8	**High Limit 1**		MVH1	*Warning High limit 1*
		-	MVH1 >= MAX	*Invisible*
		Filled Yellow	MV>H1 = 1 and AL_F1_BLK = 1	
		Unfilled Yellow	AL_F1_BLK = 1	
		Filled Red flashing	MV>H1 = 1 and AU_MV>H1 = 1	
		Unfilled Red flashing	AU_MV>H1 = 1	
		Filled Red	MV>H1 = 1	
		Unfilled Grey	-	
9	**Low Limit 1**		MVL1	*Warning Low limit 1*
		-	MVL1 <= MIN	*Invisible*
		Filled Yellow	MV<L1 = 1 and AL_F1_BLK = 1	
		Unfilled Yellow	AL_F1_BLK = 1	
		Filled Red flashing	MV<L1 = 1 and AU_MV<L1 = 1	
		Unfilled Red flashing	AU_MV<L1 = 1	
		Filled Red	MV<L1 = 1	
		Unfilled Grey	-	

No	Description	Presentation	Condition	Remarks
10	**Low Limit 2**		MVL2	*Alarm Low limit 2*
	—◁	-	MVL2 <= MIN	*Invisible*
		Filled Yellow	MV<L2 = 1 and AL_F2_BLK = 1	
		Unfilled Yellow	AL_F2_BLK = 1	
		Filled Red flashing	MV<L2 = 1 and AU_MV<L2 = 1	
		Unfilled Red flashing	AU_MV<L2 = 1	
		Filled Red	MV<L2 = 1	
		Unfilled Grey	-	
11	**Warning Indication Ratio**	**RAT=H** Yellow	RATIO=HL = 1	*Warning for Ratio*
		RAT=L Yellow	RATIO=LL = 1	
12	**Warning Indication Output**	**OUT=H** Yellow	OUT=HL = 1	*Warning for Output*
		OUT=L Yellow	OUT=LL =1	
13	**Measured Value**			*The MV object value*
13.1	**MV**	**MV** Grey		*Text in front of the value*
13.2	**MV Value**	**? ? ?** Red	AI_ERR = 1	*AI Error*
			MV	*Measured value*
		Green	-	
13.3	**MV Unit**		UNIT	*Measured unit*
		Green	-	
14	**Ratio Value**			*The RAT object value*
14.1	**RAT**	**RAT** Grey		*RAT text in front of the value*
14.2	**RAT Value**		RATIO	*Ratio value*
		Cyan	-	
14.3	**RAT Unit**		R_UNIT	*Ratio unit*
		Cyan	-	
15	**Output Value**			*The OUT object value*
15.1	**OUT**	**OUT** Grey		*OUT text in front of the value*
15.2	**OUT Value**		POUT	*Output value*
		Magenta	-	
15.3	**OUT Unit**		PO_UNIT	*Output unit*
		Magenta	-	
16	**External OUT limitation**	**X** Yellow	(OUT=HL = 1 or OUT=LL= 1) and EOLIM = 1	*OUT limited by external limitation*

No	Description	Presentation	Condition	Remarks
17.1	**BIAS Text**	**BIAS** Grey		*Text in front of the value*
17.2	**BIAS Value**	Blue	PARAM9 EBIAS = 1	*External Bias value*
		Blue	BIAS EBIAS = 0	*Bias value*
17.3	**BIAS Unit**	**Ext** Blue	EBIAS = 1	*External Bias*
		Blue	PO_UNIT EBIAS = 0	*Bias unit*

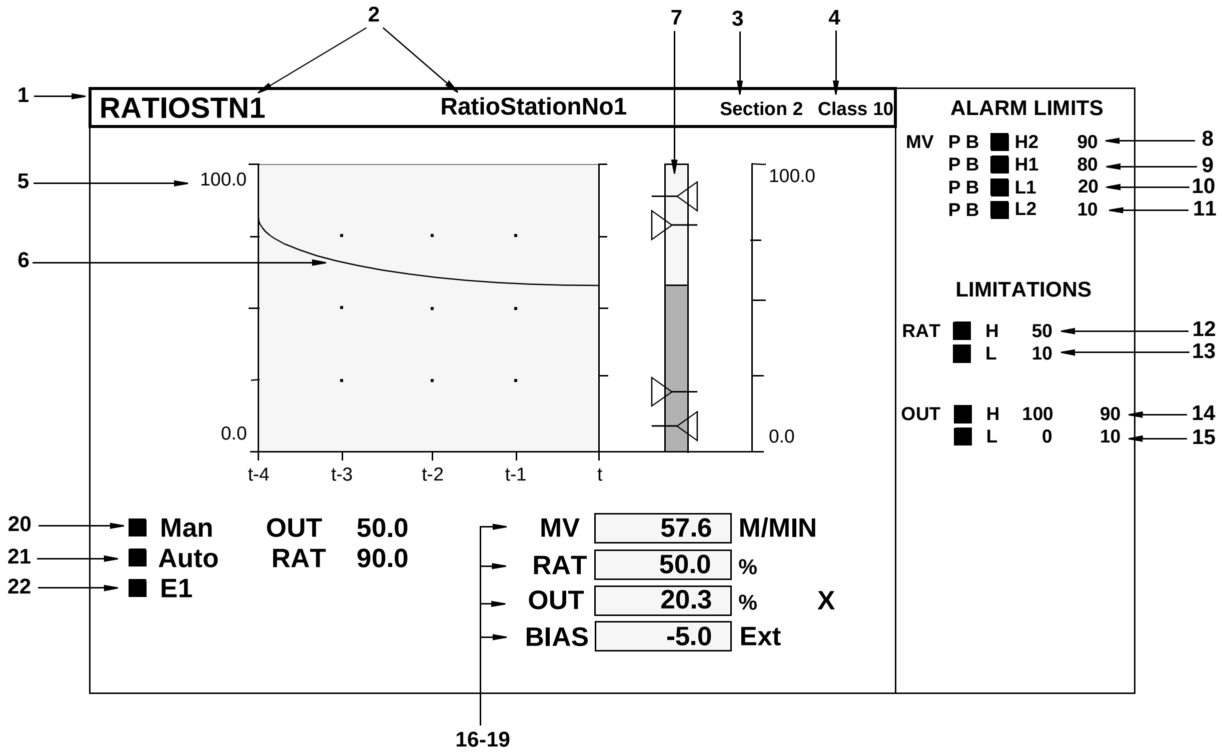
The conditions are in priority order. Underlined parameters are configurable.

Configuration:

Parameters	Affects	Options (bold is default)	Remarks
NameFont	2. Header Name	**FC50**, any font	
ManModeColor	3.1 Mode	**K5** (Green), any color	

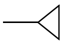
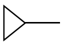
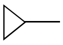
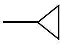
4.16.4 RATOB01

Presentation:



Behavior:

No	Description	Presentation	Condition	Remarks
1	**SelectFrame**	White	SELECTED = 1	*Object select frame*
		Black	-	
2	**Header**		NAME and DESCR	*Object name and description*
		Red flashing	AL_UNACK = 1	*Unacknowledged alarm*
		Red	DISTURB = 1	*Alarm*
		Green	-	*Normal*
3.1	**Section Text**	**Section** Grey		*Text in front of the value*
3.2	**Section Value**	Green	PROC_SEC	*Process section*
4.1	**Class Text**	**Class** Grey		*Text in front of the value*
4.2	**Class Value**	Green	CLASS	*Object class*
5	**Range Max**		MAX	*Range Max of the MV value*
		Green	-	
	Range Min		MIN	*Range Min of the MV value*
		Green	-	

No	Description	Presentation	Condition	Remarks
6	**Measure Value Trim Curve**		MV	*Object value - Trim curve*
		Green	-	
7.1	**Measured Value Bargraph**		MV	*Object value - Bargraph*
		Green	-	
7.2	**High Limit 2**		MVH2	*Alarm High limit 2*
		-	MVH2 >= MAX	*Invisible*
		Filled Yellow	MV>H2 = 1 and AL_F2_BLK = 1	
		Unfilled Yellow”	AL_F2_BLK = 1	
		Filled Red flashing	MV>H2 = 1 and AU_MV>H2 = 1	
		Unfilled Red flashing	AU_MV>H2 = 1	
		Filled Red	MV>H2 = 1	
		Unfilled Grey	-	
7.3	**High Limit 1**		MVH1	*Warning High limit 1*
		-	MVH1 >= MAX	*Invisible*
		Filled Yellow	MV>H1 = 1 and AL_F1_BLK = 1	
		Unfilled Yellow	AL_F1_BLK = 1	
		Filled Red flashing	MV>H1 = 1 and AU_MV>H1 = 1	
		Unfilled Red flashing	AU_MV>H1 = 1	
		Filled Red	MV>H1 = 1	
		Unfilled Grey	-	
7.4	**Low Limit 1**		MVL1	*Warning Low limit 1*
		-	MVL1 <= MIN	*Invisible*
		Filled Yellow	MV<L1 = 1 and AL_F1_BLK = 1	
		Unfilled Yellow	AL_F1_BLK = 1	
		Filled Red flashing	MV<L1 = 1 and AU_MV<L1 = 1	
		Unfilled Red flashing	AU_MV<L1 = 1	
		Filled Red	MV<L1 = 1	
		Unfilled Grey	-	
7.5	**Low Limit 2**		MVL2	*Alarm Low limit 2*
		-	MVL2 <= MIN	*Invisible*
		Filled Yellow	MV<L2 = 1 and AL_F2_BLK = 1	
		Unfilled Yellow	AL_F2_BLK = 1	
		Filled Red flashing	MV<L2 = 1 and AU_MV<L2 = 1	
		Unfilled Red flashing	AU_MV<L2 = 1	
		Filled Red	MV<L2 = 1	
		Unfilled Grey	-	

No	Description	Presentation	Condition	Remarks
8	**ALARM LIMITS for MV**			*Alarm limits for MV*
8.1	**MV Text**	**MV** Grey		*Text in front of the line*
8.2	**Printout Blocked**	**P** Yellow	PRINT_F2_BLK = 1	*Printout blocked*
8.3	**Alarm Blocked**	**B** Yellow	AL_F2_BLK = 1	*Alarm blocked by operator*
		Bx Yellow	AL_F2_P_BLK = 1	*Alarm blocked by PC-program*
8.4	**Alarm Indication**	■ Red flashing	AU_MV>H2 = 1	*Alarm High limit 2*
		■ Red	MV> H2 = 1	
8.5	**H2 Text**	**H2** Grey		*Text in front of the value*
8.6	**H2 Value**		MVH2	*High limit 2 value*
		Green	-	
9.1	**Printout Blocked**	**P** Yellow	PRINT_F1_BLK = 1	*Printout blocked*
9.2	**Alarm Blocked**	**B** Yellow	AL_F1_BLK = 1	*Alarm blocked by operator*
		Bx Yellow	AL_F1_P_BLK = 1	*Alarm blocked by PC-program*
9.3	**Warning Indication**	■ Red flashing	AU_MV>H1 = 1	*Warning High limit 1*
		■ Red	MV> H1 = 1	
9.4	**H1 Text**	**H1** Grey		*Text in front of the value*
9.5	**H1 Value**		MVH1	*High limit 1 value*
		Green	-	
10.1	**Printout Blocked**	**P** Yellow	PRINT_F1_BLK = 1	*Printout blocked*
10.2	**Alarm Blocked**	**B** Yellow	AL_F1_BLK = 1	*Alarm blocked by operator*
		Bx Yellow	AL_F1_P_BLK = 1	*Alarm blocked by PC-program*
10.3	**Warning Indication**	■ Red flashing	AU_MV<L1 = 1	*Warning Low limit 1*
		■ Red	MV<L1 = 1	
10.4	**L1 Text**	**L1** Grey		*Text in front of the value*
10.5	**L1 Value**		MVL1	*Low limit 1 value*
		Green	-	
11.1	**Printout Blocked**	**P** Yellow	PRINT_F2_BLK = 1	*Printout blocked*
11.2	**Alarm Blocked**	**B** Yellow	AL_F2_BLK = 1	*Alarm blocked by operator*
		Bx Yellow	AL_F2_P_BLK = 1	*Alarm blocked by PC-program*
11.3	**Alarm Indication**	■ Red flashing	AU_MV<L2 = 1	*Alarm Low limit 2*
		■ Red	MV<L2 = 1	
11.4	**L2 Text**	**L2** Grey		*Text in front of the value*
11.5	**L2 Value**		MVL2	*Low limit 2 value*
		Green	-	

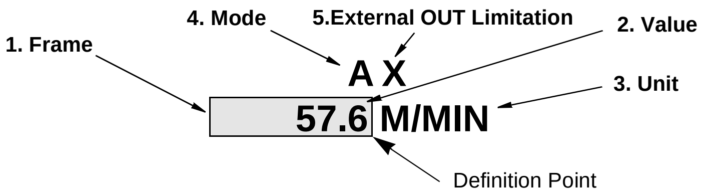
No	Description	Presentation	Condition	Remarks
12	**LIMITATIONS for RAT**			*Limitations for RAT*
12.1	**RAT Text**	**RAT** Grey		*Text in front of the line*
12.2	**Warning Indication**	■ Yellow	RATIO=HL = 1	*Warning Ratio High*
12.3	**H Text**	**H** Grey		*Text in front of the value*
12.4	**H Value**		RATIOH	*Ratio High value*
		Cyan	-	
13.1	**Warning Indication**	■ Yellow	RATIO=LL = 1	*Warning Ratio Low*
13.2	**L Text**	**L** Grey		*Text in front of the value*
13.3	**L Value**		RATIOL	*Ratio Low value*
		Cyan	-	
14	**LIMITATIONS for OUT**			*Limitations for OUT*
14.1	**OUT Text**	**OUT** Grey		*Text in front of the line*
14.2	**Warning Indication**	■ Yellow	OUT=HL = 1	*Warning Output High*
14.3	**H Text**	**H** Grey		*Text in front of the value*
14.4	**H Value**		OUTPH	*Output High value*
		Grey	EOLIM = 1	
		Magenta	-	
14.5	**External H value**		EOHL	*External Output High value*
		Magenta	EOLIM = 1	
		Grey	-	
15.1	**Warning Indication**	■ Yellow	OUT=LL = 1	*Warning Output Low*
15.2	**L Text**	**L** Grey		*Text in front of the value*
15.3	**L Value**		OUTPL	*Output Low value*
		Grey	EOLIM = 1	
		Magenta	-	
15.4	**External L Value**		EOLL	*External Output Low value*
		Magenta	EOLIM = 1	
		Grey	-	

No	Description	Presentation	Condition	Remarks
16.1	**MV Text**	**MV** Grey		*Text in front of the value*
16.2	**MV Value**	**? ? ?** Red	AI_ERR = 1	*AI Error*
			MV	*Measured value*
		Green	-	
16.3	**MV Unit**		UNIT	*Measured unit*
		Green	-	
17.1	**RAT Text**	**RAT** Grey		*Text in front of the value*
17.2	**RAT Value**		RATIO	*Ratio value*
		Cyan	-	
17.3	**RAT Unit**		R_UNIT	*Ratio unit*
		Cyan	-	
18.1	**OUT Text**	**OUT** Grey		*Text in front of the value*
18.2	**OUT Value**		POUT	*Output value*
		Magenta	-	
18.3	**OUT Unit**		PO_UNIT	*Output unit*
		Magenta	-	
18.4	**External OUT Limitation**	**X** Yellow	(OUT=HL = 1 or OUT=LL= 1) and EOLIM = 1	*OUT limited by external limitation*
19.1	**BIAS Text**	**BIAS** Grey		*Text in front of the value*
19.2	**BIAS Value**		PARAM9	*External Bias value*
		Blue	EBIAS = 1	
			BIAS	*Bias value*
		Blue	EBIAS = 0	
19.3	**BIAS Unit**	**Ext** Blue	EBIAS = 1	*External Bias*
			PO_UNIT	*Bias unit*
		Blue	EBIAS = 0	

No	Description	Presentation	Condition	Remarks
20.1	**Man indication**	■ Green filled	MAN = 1	*Manual mode*
20.2	**Man Text**	**Man** Green	MAN = 1	*Text behind the indication*
		Man Grey	-	
20.3	**Man Out Text**	**OUT** Grey		*Text in front of the value*
20.4	**Man Out Value**		MANOUT	*Man Out value*
		Magenta	MAN = 1	*Manual mode*
		Grey	-	
21.1	**Auto indication**	■ Green filled	AUTO = 1	*Auto mode*
21.2	**Auto Text**	**Auto** Green	AUTO = 1	*Text behind the indication*
		Auto Grey	-	
21.3	**Auto Ratio Text**	**RAT** Grey		*Text in front of the value*
21.4	**Auto Ratio Value**		RATIOREF	*Auto Ratio value*
		Cyan	AUTO = 1	*Auto mode*
		Grey	-	
22.1	**E1 indication**	■ Green filled	E1 = 1	*E1 mode*
22.2	**E1 Text**	**E1** Green	E1 = 1	*Text behind the indication*
		E1 Grey	-	
22.3	**E1 Name**		E1NAME	*User text behind the text E1*
		Green	E1 = 1	
		Grey	-	

4.16.5 RATPD01

Presentation:



Behavior:

No	Description	Presentation	Condition	Remarks
1	**SelectFrame**	White	SELECTED = 1	*Selected*
		Dotted Yellow	AL_F1_BLK = 1 or AL_F2_BLK = 1	*Alarm blocked by operator*
		Black	-	FrameColor
2	**Measured Value**		MV	*Object value*
		? ? ? Red flashing	AI_ERR = 1 and AL_UNACK = 1	*Unacknowledged signal error*
		Red flashing	AL_UNACK = 1	*Unacknowledged alarm*
		? ? ? Red	AI_ERR = 1	*Signal error*
		Red	DISTURBANCE = 1	*Alarm*
		Green	-	NormalColor
3	**Unit**		UnitVisible = onRequest	*Object unit*
		Green	UNIT	NormalColor
		-	UnitVisible = noSubscription	*Unit is invisible*
4	**Mode**		ModeVisible = true	*Object mode*
		M Green	MAN = 1	*Manual mode* ManModeColor
		A Green	AUTO = 1	*Auto mode* AutoModeColor
		E1Green	E1 = 1	*E1 mode* E1ModeColor
		-	ModeVisible = false	*Mode is invisible*
5	**External OUT Limitation**		InterlockVisible = true	*External output limitation*
		X Yellow	(OUT=HL = 1 or OUT=LL= 1) and EOLIM = 1	*External output limitation* InterlockColor
		-	InterlockVisible = false	*External limitation is invisible*

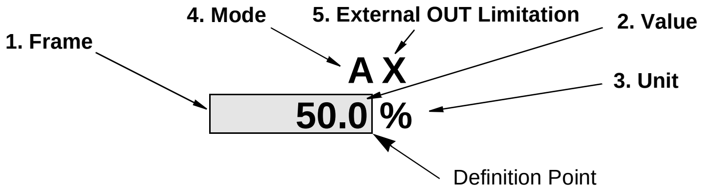
The conditions are in priority order. Underlined parameters are configurable.

Configuration:

Parameters	Affects	Options (bold is default)	Remarks
ModeVisible	4. Mode	**true**, false	
InterlockVisible	5. External OUT Limitation	**true**, false	
UnitVisible	3. Unit	**onRequest**, noSubscription	
NormalColor	2. Measured Value and 3. Unit	**K5** (Green), any color	
ManModeColor	4. Mode	**K5** (Green), any color	
AutoModeColor	4. Mode	**K5** (Green), any color	
E1ModeColor	4. Mode	**K5** (Green), any color	
InterlockColor	5. External OUT Limitation	**K3** (Yellow), any color	
SelectAreaColor	1. SelectArea	**K16** (Black), any color	*Background color and deletion color*
Font	2. Measured Value and 3. Unit	**FA40**, any font	
FrameColor	1. SelectFrame	**K16** (Black), any color	
FrameWidth	1. SelectFrame	**2**, (1..4)	
NumberOfChar	2. Measured Value	**7**	*Include "." and "-"*
UseDisplayColor	4. Mode	**false**, true	*true if DisplayColor used*
DisplayColor	4. Mode	**N13** (Black), any color	*Bg for Mode if UseDisplayColor is true*

4.16.6 RATPD02

Presentation:



Behavior:

No	Description	Presentation	Condition	Remarks
1	**SelectFrame**	White	SELECTED = 1	*Selected*
		Dotted Yellow	AL_F1_BLK = 1 or AL_F2_BLK = 1	*Alarm blocked by operator*
		Black	-	FrameColor
2	**Ratio Value**		WRATIO	*Object ratio value*
		Red flashing	AL_UNACK = 1	*Unacknowledged alarm*
		Red	DISTURB = 1	*Alarm*
		Cyan	-	NormalColor
3	**Unit**		UnitVisible = onRequest	*Object unit*
		Cyan	R_UNIT	NormalColor
		-	UnitVisible = noSubscription	*Unit is invisible*
4	**Mode**		ModeVisible = true	*Object mode*
		M Green	MAN = 1	*Manual mode* ManModeColor
		A Green	AUTO = 1	*Auto mode* AutoModeColor
		E1Green	E1 = 1	*E1 mode* E1ModeColor
		-	ModeVisible = false	*Mode is invisible*
5	**External OUT Limitation**		InterlockVisible = true	*External output limitation*
		X Yellow	(OUT=HL = 1 or OUT=LL= 1) and EOLIM = 1	*External output limitation* InterlockColor
		-	InterlockVisible = false	*External limitation is invisible*

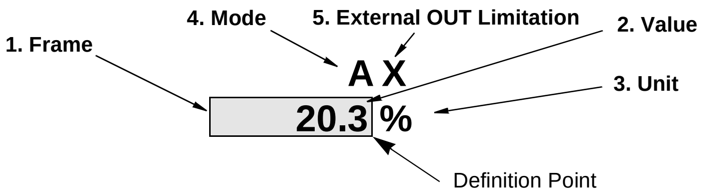
The conditions are in priority order. Underlined parameters are configurable.

Configuration:

Parameters	**Affects**	**Options (bold is default)**	**Remarks**
ModeVisible	4. Mode	**true**, false	
InterlockVisible	5. External OUT Limitation	**true**, false	
UnitVisible	3. Unit	**onRequest**, noSubscription	
NormalColor	2. Ratio Value and 3. Unit	**K9** (Cyan), any color	
ManModeColor	4. Mode	**K5** (Green), any color	
AutoModeColor	4. Mode	**K5** (Green), any color	
E1ModeColor	4. Mode	**K5** (Green), any color	
InterlockColor	5. External OUT Limitation	**K3** (Yellow), any color	
SelectAreaColor	1. SelectArea	**K16** (Black), any color	*Background color and deletion color*
Font	2. Ratio Value and 3. Unit	**FA40**, any font	
FrameColor	1. SelectFrame	**K16** (Black), any color	
FrameWidth	1. SelectFrame	**2**, (1..4)	
NumberOfChar	2. Ratio Value	**7**	*Include "." and "-"*
UseDisplayColor	4. Mode	**false**, true	*true if DisplayColor used*
DisplayColor	4. Mode	**N13** (Black), any color	*Bg for Mode if UseDisplayColor is true*

4.16.7 RATPD03

Presentation:



Behavior:

No	Description	Presentation	Condition	Remarks
1	**SelectFrame**	White	SELECTED = 1	*Selected*
		Dotted Yellow	AL_F1_BLK = 1 or AL_F2_BLK = 1	*Alarm blocked by operator*
		Black	-	FrameColor
2	**Output Value**		POUT	*Object ratio value*
		Red flashing	AL_UNACK = 1	*Unacknowledged alarm*
		Red	DISTURB = 1	*Alarm*
		Magenta	-	NormalColor
3	**Unit**		UnitVisible = onRequest	*Object unit*
		Magenta	PO_UNIT	NormalColor
		-	UnitVisible = noSubscription	*Unit is invisible*
4	**Mode**		ModeVisible = true	*Object mode*
		M Green	MAN = 1	*Manual mode* ManModeColor
		A Green	AUTO = 1	*Auto mode* AutoModeColor
		E1Green	E1 = 1	*E1 mode* E1ModeColor
		-	ModeVisible = false	*Mode is invisible*
5	**External OUT Limitation**		InterlockVisible = true	*External output limitation*
		X Yellow	(OUT=HL = 1 or OUT=LL= 1) and EOLIM = 1	*External output limitation* InterlockColor
		-	InterlockVisible = false	*External limitation is invisible*

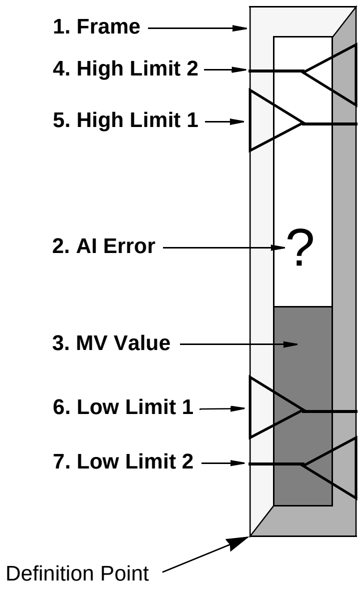
The conditions are in priority order. Underlined parameters are configurable.

Configuration:

Parameters	**Affects**	**Options (bold is default)**	**Remarks**
ModeVisible	4. Mode	**false**, true	
InterlockVisible	5. External OUT Limitation	**false**, true	
UnitVisible	3. Unit	**onRequest**, noSubscription	
NormalColor	2. Output Value and 3. Unit	**K11** (Magenta), any color	
ManModeColor	4. Mode	**K5** (Green), any color	
AutoModeColor	4. Mode	**K5** (Green), any color	
E1ModeColor	4. Mode	**K5** (Green), any color	
InterlockColor	5. External OUT Limitation	**K3** (Yellow), any color	
SelectAreaColor	1. SelectArea	**K16** (Black), any color	*Background color and deletion color*
Font	2. Output Value and 3. Unit	**FA40**, any font	
FrameColor	1. SelectFrame	**K16** (Black), any color	
FrameWidth	1. SelectFrame	**2**, (1..4)	
NumberOfChar	2. Output Value	**7**	*Include "." and "-"*
UseDisplayColor	4. Mode	**false**, true	*true if DisplayColor used*
DisplayColor	4. Mode	**N13** (Black), any color	*Bg for Mode if UseDisplayColor is true*

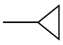
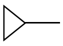
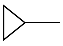
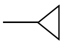
4.16.8 RATPD51

Presentation:



Behavior:

No	Description	Presentation	Condition	Remarks
1.1	**SelectFrame**	White	SELECTED = 1	*Object frame*
		Black	-	FrameColor
1.2	**TopLeftEdge**			*Three Dimensions effect*
		Grey	-	TopLeftColor
1.3	**BottomRightEdge**			*Three Dimensions effect*
		Grey	-	BottomRightColor
2	**AI Error**	**?** Red flashing	AI_ERR = 1 and AL_UNACK = 1	*Unacknowledged signal error*
		? Red	AI_ERR = 1	*Signal error*
3	**Measured Value**		MV	*Object value*
		-	AI_ERR = 1	*Invisible - I/O Error*
		Red flashing	AL_UNACK = 1	*Unacknowledged alarm*
		Red	DISTURB =1	*Alarm*
		Green	-	NormalColor

No	Description	Presentation	Condition	Remarks
4	**High Limit 2**		MVH2	*Alarm High limit 2*
		-	MVH2 >= MAX	*Invisible*
		Filled Yellow	MV>H2 = 1 and AL_F2_BLK = 1	
		Unfilled Yellow”	AL_F2_BLK = 1	
		Filled Red flashing	MV>H2 = 1 and AU_MV>H2 = 1	
		Unfilled Red flashing	AU_MV>H2 = 1	
		Filled Red	MV>H2 = 1	
		Unfilled Grey	-	LimitColor
5	**High Limit 1**		MVH1	*Warning High limit 1*
		-	MVH1 >= MAX	*Invisible*
		Filled Yellow	MV>H1 = 1 and AL_F1_BLK = 1	
		Unfilled Yellow	AL_F1_BLK = 1	
		Filled Red flashing	MV>H1 = 1 and AU_MV>H1 = 1	
		Unfilled Red flashing	AU_MV>H1 = 1	
		Filled Red	MV>H1 = 1	
		Unfilled Grey	-	LimitColor
6	**Low Limit 1**		MVL1	*Warning Low limit 1*
		-	MVL1 <= MIN	*Invisible*
		Filled Yellow	MV<L1 = 1 and AL_F1_BLK = 1	
		Unfilled Yellow	AL_F1_BLK = 1	
		Filled Red flashing	MV<L1 = 1 and AU_MV<L1 = 1	
		Unfilled Red flashing	AU_MV<L1 = 1	
		Filled Red	MV<L1 = 1	
		Unfilled Grey	-	LimitColor
7	**Low Limit 2**		MVL2	*Alarm Low limit 2*
		-	MVL2 <= MIN	*Invisible*
		Filled Yellow	MV<L2 = 1 and AL_F2_BLK = 1	
		Unfilled Yellow	AL_F2_BLK = 1	
		Filled Red flashing	MV<L2 = 1 and AU_MV<L2 = 1	
		Unfilled Red flashing	AU_MV<L2 = 1	
		Filled Red	MV<L2 = 1	
		Unfilled Grey	-	LimitColor

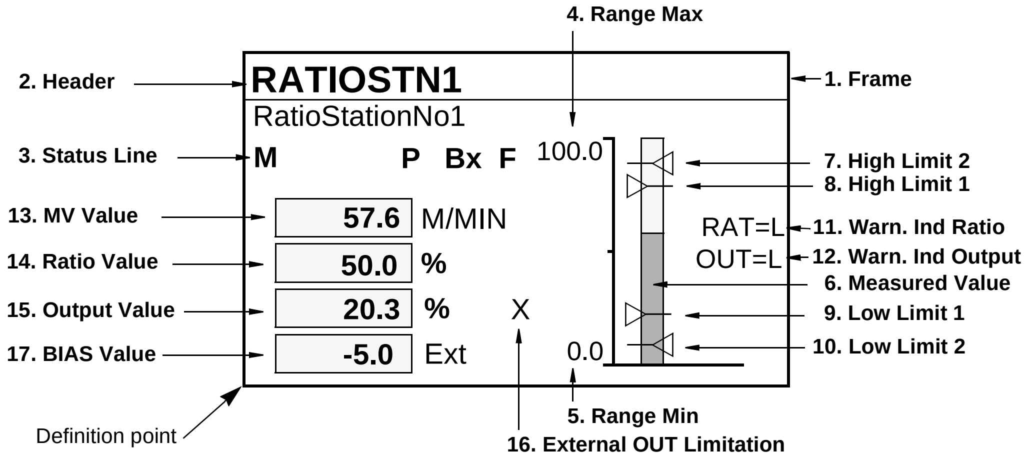
The conditions are in priority order. Underlined parameters are configurable.

Configuration:

Parameters	**Affects**	**Options (bold is default)**	**Remarks**
NormalColor	3. Measured Value	**K5** (Green), any color	
TopLeftColor	1.2 TopLeftEdge	**N13** (Grey), any color	*Regarding the choice of the color it will be three dimension effect*
BottomRightColor	1.3 BottomRightEdge	**N13** (Grey), any color	
FrameColor	1.1 SelectFrame	**K16** (Black), any color	
FrameWidth	1.1 SelectFrame	**2**, (1..4)	
BarBackColor	3. Measured Value	**K16** (Black), any color	*Background color of the bargraph*
LimitColor	4. High Limit 2, 5. High Limit 1, 6. Low Limit 1 and 7. Low Limit 1	**M16** (Grey), any color	*Color of the limit arrows*

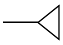
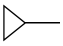
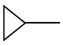
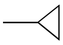
4.16.9 RATWI01

Presentation:



Behavior:

No	Description	Presentation	Condition	Remarks
1	**Select Frame**			*Object select frame*
		White	SELECTED = 1	*Only for overlap*
		Black	-	
2	**Header**		NAME and DESCR	*Object name and description*
		Red flashing	AL_UNACK = 1	*Unacknowledged alarm*
		Red	DISTURB = 1	*Alarm*
		Green	-	*Normal*
3	**Status Line**			*Status Line*
3.1	**Mode**	**M** Green	MAN = 1	*Manual mode*
		A Green	AUTO = 1	*Auto mode*
		E1 Green	E1 = 1	*E1 mode*
3.2	**Printout Blocked**	**P** Yellow	PRINT_F1_BLK = 1 or PRINT_F2_BLK = 1	*Printout blocked*
3.3	**Alarm Blocked**	**B** Yellow	AL_F1_BLK = 1 or AL_F2_BLK = 1	*Alarm blocked by operator*
		Bx Yellow	AL_F1_P_BLK = 1 or AL_F2_P_BLK = 1	*Alarm blocked by PC-program*
3.4	**Alarm Indication**	**F** Red	DISTURB = 1	*Alarm*
4	**Range Max**		MAX	*Range Max of the MV value*
		Green	-	
5	**Range Min**		MIN	*Range Min of the MV value*
		Green	-	

No	Description	Presentation	Condition	Remarks
6	**Measured Value Bargraph**		MV	*Object value*
		Green	-	
7	**High Limit 2**		MVH2	*Alarm High limit 2*
		-	MVH2 >= MAX	*Invisible*
		Filled Yellow	MV>H2 = 1 and AL_F2_BLK = 1	
		Unfilled Yellow”	AL_F2_BLK = 1	
		Filled Red flashing	MV>H2 = 1 and AU_MV>H2 = 1	
		Unfilled Red flashing	AU_MV>H2 = 1	
		Filled Red	MV>H2 = 1	
		Unfilled Grey	-	
8	**High Limit 1**		MVH1	*Warning High limit 1*
		-	MVH1 >= MAX	*Invisible*
		Filled Yellow	MV>H1 = 1 and AL_F1_BLK = 1	
		Unfilled Yellow	AL_F1_BLK = 1	
		Filled Red flashing	MV>H1 = 1 and AU_MV>H1 = 1	
		Unfilled Red flashing	AU_MV>H1 = 1	
		Filled Red	MV>H1 = 1	
		Unfilled Grey	-	
9	**Low Limit 1**		MVL1	*Warning Low limit 1*
		-	MVL1 <= MIN	*Invisible*
		Filled Yellow	MV<L1 = 1 and AL_F1_BLK = 1	
		Unfilled Yellow	AL_F1_BLK = 1	
		Filled Red flashing	MV<L1 = 1 and AU_MV<L1 = 1	
		Unfilled Red flashing	AU_MV<L1 = 1	
		Filled Red	MV<L1 = 1	
		Unfilled Grey	-	
10	**Low Limit 2**		MVL2	*Alarm Low limit 2*
		-	MVL2 <= MIN	*Invisible*
		Filled Yellow	MV<L2 = 1 and AL_F2_BLK = 1	
		Unfilled Yellow	AL_F2_BLK = 1	
		Filled Red flashing	MV<L2 = 1 and AU_MV<L2 = 1	
		Unfilled Red flashing	AU_MV<L2 = 1	
		Filled Red	MV<L2 = 1	
		Unfilled Grey	-	

No	Description	Presentation	Condition	Remarks
11	**Warning Indication Ratio**	**RAT=H** Yellow	RATIO=HL = 1	*Warning for Ratio*
		RAT=L Yellow	RATIO=LL = 1	
12	**Warning Indication Output**	**OUT=H** Yellow	OUT=HL = 1	*Warning for Output*
		OUT=L Yellow	OUT=LL =1	
13	**Measured Value**			*The MV object value*
13.1	**MV Value**	**? ? ?** Red	AI_ERR = 1	*AI Error*
			MV	*Measured value*
		Green	-	
13.2	**MV Unit**		UNIT	*Measured unit*
		Green	-	
14	**Ratio Value**			*The RAT object value*
14.1	**RAT Value**		RATIO	*Ratio value*
		Cyan	-	
14.2	**RAT Unit**		R_UNIT	*Ratio unit*
		Cyan	-	
15	**Output Value**			*The OUT object value*
15.1	**OUT Value**		POUT	*Output value*
		Magenta	-	
15.2	**OUT Unit**		PO_UNIT	*Output unit*
		Magenta	-	
16	**External OUT limitation**	**X** Yellow	(OUT=HL = 1 or OUT=LL= 1) and EOLIM = 1	*OUT limited by external limitation*
17	**BIAS Value**			*The BIAS object value*
17.1	**BIAS Value**	Blue	PARAM9 EBIAS = 1	*External Bias value*
		Blue	BIAS EBIAS = 0	*Bias value*
17.2	**BIAS Unit**	**Ext** Blue	EBIAS = 1	*External Bias*
		Blue	PO_UNIT EBIAS = 0	*Bias unit*

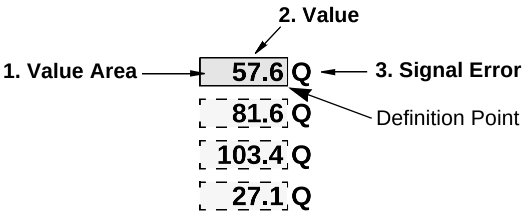
4.17 Report display element

4.17.1 REPPD04

Presentation:

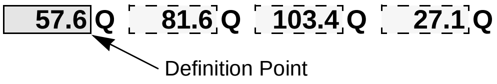
Presentation = true

Display element will present the values in a column.



Presentation = false

Display element will present the values in a line.



Utilized to transfer 4 real values. It contains a DAT(B) directly followed by 4 DAT(R). DAT(B) shows the status of the succeeding DAT(R)-element which contain the real values which can be presented in the report display.

Behavior:

No	Description	Presentation	Condition	Remarks
1	**Value Area**	Black	-	BackgroundColor
2	**Values**			*Presentation of 4 real values in a line or in a column*
			REALx	*x = 1, 2, 3 or 4*
		-	DAT(B)_VALUE4 = 1 or DAT(B)_VALUE12 = 1 or DAT(B)_VALUE20 = 1 or DAT(B)_VALUE28 = 1	*Real value 1 invisible* *Real value 2 invisible* *Real value 3 invisible* *Real value 4 invisible*
		Red	DAT(B)_VALUE8 = 1 or DAT(B)_VALUE16 = 1 or DAT(B)_VALUE24 = 1 or DAT(B)_VALUE32 = 1	*Alarm for real value 1* *Alarm for real value 2* *Alarm for real value 3* *Alarm for real value 4*
		Green	-	NormalColor
3	**Signal Error**			*Signal error for each value*
		Q Red	DAT(B)_VALUE7 = 1 or DAT(B)_VALUE15 = 1 or DAT(B)_VALUE23 = 1 or DAT(B)_VALUE31 = 1	*Signal error for real value 1* *Signal error for real value 2* *Signal error for real value 3* *Signal error for real value 4*
		-	-	*Signal error is invisible*

The conditions are in priority order. Underlined parameters are configurable.

Configuration:

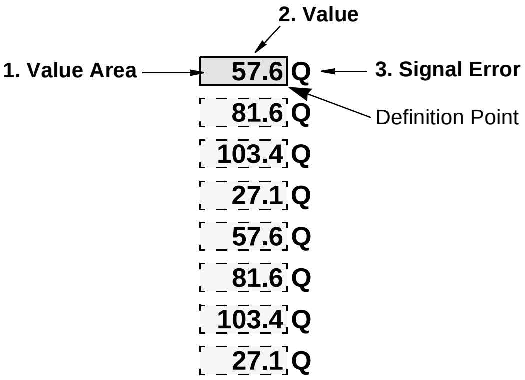
Parameters	**Affects**	**Options (bold is default)**	**Remarks**
NormalColor	2. Values	**K5** (Green), any color	
Presentation	2. Values and 3. Signal Error	**true** = Vertical, false = Horizontal	
Font	2. Values and 3. Signal Error	**FA40**, any font	
BackgroundColor	1. Value Area	**K16** (Black), any color	*Background color and deletion color*
UseDisplayColor	3. Signal Error	**false**, true	*true if DisplayColor used*
DisplayColor	3. Signal Error	**N13** (Black), any color	*Bg for Mode if UseDisplayColor is true*

4.17.2 REPPD08

Presentation:

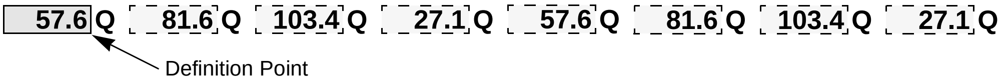
Presentation = true

Display element will present the values in a column.



Presentation = false

Display element will present the values in a line.



Utilized to transfer 8 real values. It contains a DAT1(B) directly followed by 4 DAT(R) and then a DAT2(B) again followed by 4 DAT(R). DATx(B) shows the status of the succeeding DAT(R)-element which contain the real values which can be presented in the report display.

Behavior:

No	Description	Presentation	Condition	Remarks
1	**Value Area**	Black	-	BackgroundColor
2	**Values**			*Presentation of 4 real values in a line or in a column*
			REALx	*x = 1, 2, 3, 4, 5, 6, 7 or 8*
		-	DAT1(B)_VALUE4 = 1 or DAT1(B)_VALUE12 = 1 or DAT1(B)_VALUE20 = 1 or DAT1(B)_VALUE28 = 1 or DAT2(B)_VALUE4 = 1 or DAT2(B)_VALUE12 = 1 or DAT2(B)_VALUE20 = 1 or DAT2(B)_VALUE28 = 1	*Real value 1 invisible* *Real value 2 invisible* *Real value 3 invisible* *Real value 4 invisible* *Real value 5 invisible* *Real value 6 invisible* *Real value 7 invisible* *Real value 8 invisible*
		Red	DAT1(B)_VALUE8 = 1 or DAT1(B)_VALUE16 = 1 or DAT1(B)_VALUE24 = 1 or DAT1(B)_VALUE32 = 1 or DAT2(B)_VALUE8 = 1 or DAT2(B)_VALUE16 = 1 or DAT2(B)_VALUE24 = 1 or DAT2(B)_VALUE32 = 1	*Alarm for real value 1* *Alarm for real value 2* *Alarm for real value 3* *Alarm for real value 4* *Alarm for real value 5* *Alarm for real value 6* *Alarm for real value 7* *Alarm for real value 8*
		Green	-	NormalColor

No	Description	Presentation	Condition	Remarks
3	**Signal Error**			*Signal error for each value*
		Q Red	DAT1(B)_VALUE7 = 1 or DAT1(B)_VALUE15 = 1 or DAT1(B)_VALUE23 = 1 or DAT1(B)_VALUE31 = 1 or DAT2(B)_VALUE7 = 1 or DAT2(B)_VALUE15 = 1 or DAT2(B)_VALUE23 = 1 or DAT2(B)_VALUE31 = 1	*Signal error for real value 1* *Signal error for real value 2* *Signal error for real value 3* *Signal error for real value 4* *Signal error for real value 5* *Signal error for real value 6* *Signal error for real value 7* *Signal error for real value 8*
		-	-	*Signal error is invisible*

The conditions are in priority order. Underlined parameters are configurable.

Configuration:

Parameters	Affects	Options (bold is default)	Remarks
NormalColor	2. Values	**K5** (Green), any color	
Presentation	2. Values and 3. Signal Error	**true** = Vertical, false = Horizontal	
Font	2. Values and 3. Signal Error	**FA40**, any font	
BackgroundColor	1. Value Area	**K16** (Black), any color	*Background color and deletion color*
UseDisplayColor	3. Signal Error	**false**, true	*true if DisplayColor used*
DisplayColor	3. Signal Error	**N13** (Black), any color	*Bg for Mode if UseDisplayColor is true*

4.18 Process Dialog for Sequence SEQ

4.18.1 MIN Dialog (No authority key)

4.18.1.1 Keyboard keys

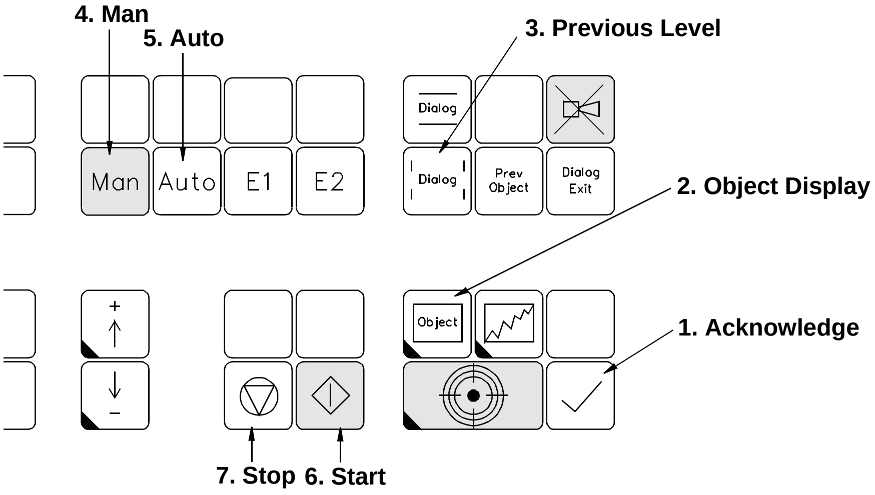


Figure 4-109. Keyboard keys

Key 1: Acknowledge	Perform: Acknowledge	AL_UNACK = 0
Key 2: Object Display	Select: Object Display	
Key 3: Previous Level	Select Dynamic keys: Top Level	
Key 4: Man	Perform: Set to manual mode	MAN = 1
Key 5: Auto	Perform: Set to automatic mode	AUTO = 1
Key 6: Start	Perform: Start the Sequence	START = 1
Key 7: Stop	Perform: Stop the Sequence	START = 0

4.18.1.2 Dynamic keys, Top Level

D1	D2 ⊟ Hold	D3 Step	D4 Reset	D5
D6	D7	D8	D9	D10 Keyboard...

Figure 4-110. Dynamic keys

D2: Hold	Perform: Set to hold mode	HOLD = 1
D3: Step	Perform: Steps the Sequence one step	STEP = 1
D4: Reset	Perform: Reset the Sequence to initial values	
D10:Keyboard...	Select Dynamic keys: Keyboard	

4.18.1.3 Dynamic keys, Keyboard

D1 ■ Start	D2 Man	D3 Auto	D4	D5
D6 □ Stop	D7 Acknowledge	D8 Object Display	D9	D10

Figure 4-111. Dynamic keys

D1: Start	Perform: Start the Sequence	START = 1
D2: Man	Perform: Set to manual mode	MAN = 1
D3: Auto	Perform: Set to automatic mode	AUTO = 1
D6: Stop	Perform: Stop the Sequence	START = 0
D7: Acknowledge	Perform: Acknowledge	AL_UNACK = 0
D8: Object Display	Select: Object Display	

4.18.2 MAX Dialog (Authority key)

4.18.2.1 Keyboard keys

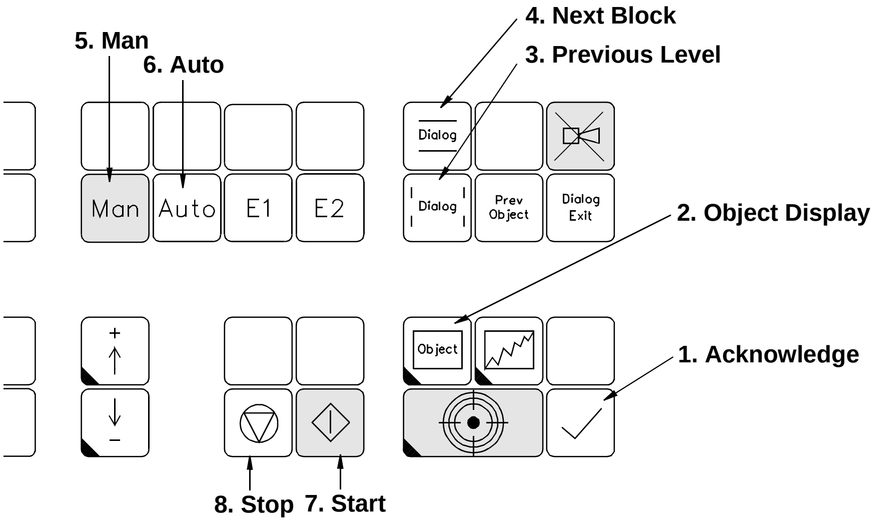


Figure 4-112. Keyboard keys

Key 1: Acknowledge	Perform: Acknowledge	AL_UNACK = 0
Key 2: Object Display	Select: Object Display	
Key 3: Previous Level	Select Dynamic keys: Top Level	
Key 4: Next Block	Page between the dynamic key sets: Block, Parameters and Keyboard	
Key 5: Man	Perform: Set to manual mode	MAN = 1
Key 6: Auto	Perform: Set to automatic mode	AUTO = 1
Key 7: Start	Perform: Start the Sequence	START = 1
Key 8: Stop	Perform: Stop the Sequence	START = 0

4.18.2.2 Dynamic keys, Top Level

D1	D2 ⊟ Hold	D3 Step	D4 Reset	D5 Jump
D6	D7	D8 Block...	D9 Parameters...	D10 Keyboard...

Figure 4-113. Dynamic keys

D2: Hold	Perform: Set to hold mode	HOLD = 1
D3: Step	Perform: Steps the Sequence one step	STEP = 1
D4: Reset	Perform: Reset the Sequence to initial values	
D5: Jump	Perform: Jump to step JPOSN_OUTP	JUMP = 1
D8:Block...	Select Dynamic keys: Block	
D9:Parameters...	Select Dynamic keys: Parameters	
D10:Keyboard...	Select Dynamic keys: Keyboard	

4.18.2.3 Dynamic keys, Keyboard

D1 ■ Start	D2 Man	D3 Auto	D4	D5
D6 □ Stop	D7 Acknowledge	D8 Object Display	D9	D10

Figure 4-114. Dynamic keys

D1: Start	Perform: Start the Sequence	START = 1
D2: Man	Perform: Set to manual mode	MAN = 1
D3: Auto	Perform: Set to automatic mode	AUTO = 1
D6: Stop	Perform: Stop the Sequence	START = 0
D7: Acknowledge	Perform: Acknowledge	AL_UNACK = 0
D8: Object Display	Select: Object Display	

4.18.2.4 Dynamic keys, Block

D1 Block Command	D2 Block Alarm	D3 Block Printout	D4 Block I/P Event	D5 Block I/P Printout
D6 Deblock Command	D7 Deblock Alarm	D8 Deblock Printout	D9 Deblock I/P Event	D10 Deblock I/P Printout

Figure 4-115. Dynamic keys

D1: Block Command	Pressed: yellow text Released: white text	BLOCKED = 1
D2: Block Alarm	Pressed: yellow text Released: white text If BLOCKED = 1 then key is dimmed	DI1_AL_BLK = 1 and TF_AL_BLK = 1
D3: Block Printout	Pressed: yellow text Released: white text If BLOCKED = 1 then key is dimmed	DI1_PR_BLK = 1 and TF_PR_BLK = 1
D4: Block I/P Event	Pressed: yellow text Released: white text If BLOCKED = 1 then key is dimmed	PT_AL_BLK= 1 and SI_AL_BLK = 1
D5: Block I/P Printout	Pressed: yellow text Released: white text If BLOCKED = 1 then key is dimmed	PT_PR_BLK = 1 and SI_PR_BLK = 1
D6: Deblock Command	Pressed: green text Released: white text	BLOCKED = 0
D7: Deblock Alarm	Pressed: green text Released: white text If BLOCKED = 1 then key is dimmed	DI1_AL_BLK = 0 and TF_AL_BLK = 0
D8: Deblock Printout	Pressed: green text Released: white text If BLOCKED = 1 then key is dimmed	DI1_PR_BLK = 0 and TF_PR_BLK = 0
D9: Deblock I/P Event	Pressed: green text Released: white text If BLOCKED = 1 then key is dimmed	PT_AL_BLK= 0 and SI_AL_BLK = 0
D10: Deblock I/P	Pressed: green text Released: white text If BLOCKED = 1 then key is dimmed	PT_PR_BLK = 0 and SI_PR_BLK = 0

4.18.2.5 Dynamic keys, Parameters

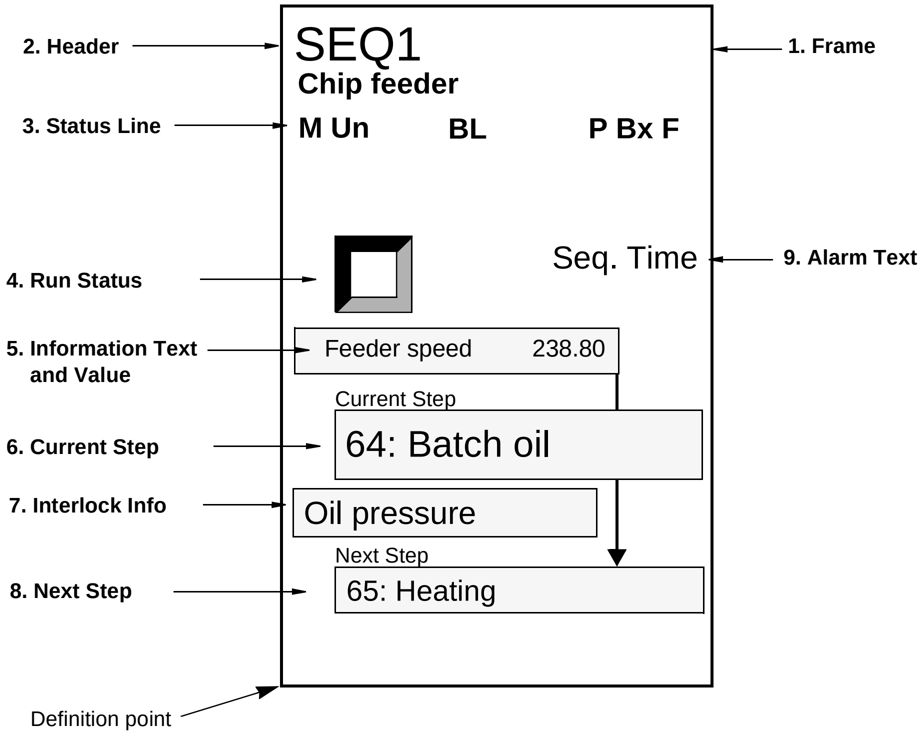
D1 Conditional	D2 Jump Pos 55	D3 No of Turns 0	D4 Interval Time 100	D5
D6 Unconditional	D7	D8	D9	D10

Figure 4-116. Dynamic keys

D1: Conditional	Pressed: yellow text Released: white text	UNCOND = 0
D2: Jump Pos	Pressed: Dialog for changing JPOSN_OUTP, value green	JPOSN_OUTP / JPOSO
D3: No of Turns	Pressed: Dialog for changing TURNSO, value green	TURNSO
D4: Interval Time	Pressed: Dialog for changing INTV_TDO, value green	INTV_TDO
D6: Unconditional	Pressed: green text Released: white text	UNCOND = 1

4.18.3 SEQGR01

Presentation:



Behavior:

No	Description	Presentation	Condition	Remarks
1	**SelectFrame**	White	SELECTED = 1	*Object select frame*
		Black	-	
2	**Header**		NAME and DESCR	*Object name and description*
		Red flashing	DI2_AL_UNACK = 1 or AU_POSN_F = 1 or AU_SERVUC = 1 or AU_SEQAL = 1 or AU_STEPAL = 1	*Unacknowledged alarm*
		Yellow	BLOCKED =1	*Command blocked*
		Red	DI2_DIST = 1	*Alarm*
		Green	-	*Normal*

No	Description	Presentation	Condition	Remarks
3	**Status Line**			*Status Line*
3.1	**Mode***	**M Un** Green	MAN = 1 and UNCOND = 1	*Manual mode* ManModeColor
		M Green	MAN = 1	*Manual mode* ManModeColor
		A Green	AUTO = 1	*Auto mode*
		HOLD Yellow	HOLD = 1	*Hold mode*
3.2	**Printout Blocked**	**P** Yellow	TF_PR_BLK = 1	*Printout blocked*
3.3	**Alarm Blocked**	**B** Yellow	DI1_AL_BLK = 1	*Alarm blocked by operator*
		Bx Yellow	DI1_AL_P_BLK = 1	*Alarm blocked by PC-program*
3.4	**Fault Indication**	**F** Red	DI2_DIST = 1	*Alarm*
3.5	**Command Blocked**	**BL** Yellow	BLOCKED = 1	*Command blocked*
4	**Run Status Indication**	☒ Green	INTERLOCK = 1 and RUN = 0	*Not Ready for Start*
		⊟ Green	HOLD = 1	
		■ Green flashing	RUN = 1 and BUSY = 1	*Not-Completed*
		■ Green	RUN = 1	
		☐ Green	RUN = 0	
5	**Information Box**	Filled background Black	BLANKINF = 0 and INFTXT <> ““	*Invisible when BLANKINF = 1*
	Information Text		INFTXT	*Information text*
		Grey	BLANKINF = 0	
	Information Value		INFVAL	*Information value*
		Grey	BLANKINF = 0 and INFTXT <> ““	
6	**Current Step Text**	**Current Step** Grey		*Current step text*
	Current Step Box	Filled background Black	POSN <> 0	*Invisible when POSN = 0*
	Current Step Number and Name		POSN **:** STEPNAME	*Current step number and name*
		Green	POSN <> 0	

No	Description	Presentation	Condition	Remarks
7	**Interlock Info Text**	**Next Step Enabled** Green	NXTCOND = 1	
		CONDTXT1 Yellow	CONDTXT1 <> ‘’ and CONDSTA1 = 0	*Condition 1 exists but is not satisfied*
		CONDTXT2 Yellow	CONDTXT2 <> ‘’ and CONDSTA2 = 0	*Condition 2 exists but is not satisfied*
		CONDTXT3 Yellow	CONDTXT3 <> ‘’ and CONDSTA3 = 0	*Condition 3 exists but is not satisfied*
		CONDTXT4 Yellow	CONDTXT4 <> ‘’ and CONDSTA4 = 0	*Condition 4 exists but is not satisfied*
		CONDTXT5 Yellow	CONDTXT5 <> ‘’ and CONDSTA5 = 0	*Condition 5 exists but is not satisfied*
		CONDTXT6 Yellow	CONDTXT6 <> ‘’ and CONDSTA6 = 0	*Condition 6 exists but is not satisfied*
		CONDTXT7 Yellow	CONDTXT7 <> ‘’ and CONDSTA7 = 0	*Condition 7 exists but is not satisfied*
		CONDTXT8 Yellow	CONDTXT8 <> ‘’ and CONDSTA8 = 0	*Condition 8 exists but is not satisfied*
8	**Next Step Text**	**Next Step** Grey		*Next step text*
	Next Step Box	Filled background Black	NXTPOS <> 0	*Invisible when NXTPOS = 0*
	Next Step Number and Name		NXTPOS **:** NXTNAME	*Next step number and name*
		Green	NXTPOS <> 0	
9	**Alarm Text**	**? ? ?** Yellow flashing	DI2_RP_F_BLK = 1	*Repeat fail block*
		-	DI1_AL_BLK = 1 or DI1_AL_P_BLK = 1	*Alarm blocked by operator or* *Alarm blocked by PC-program*
		Jump Error Red	TS_POSN_F = 1	
		Seq. Time Red	TS_SEQAL = 1	
		Step Time Red	TS_STEPAL = 1	

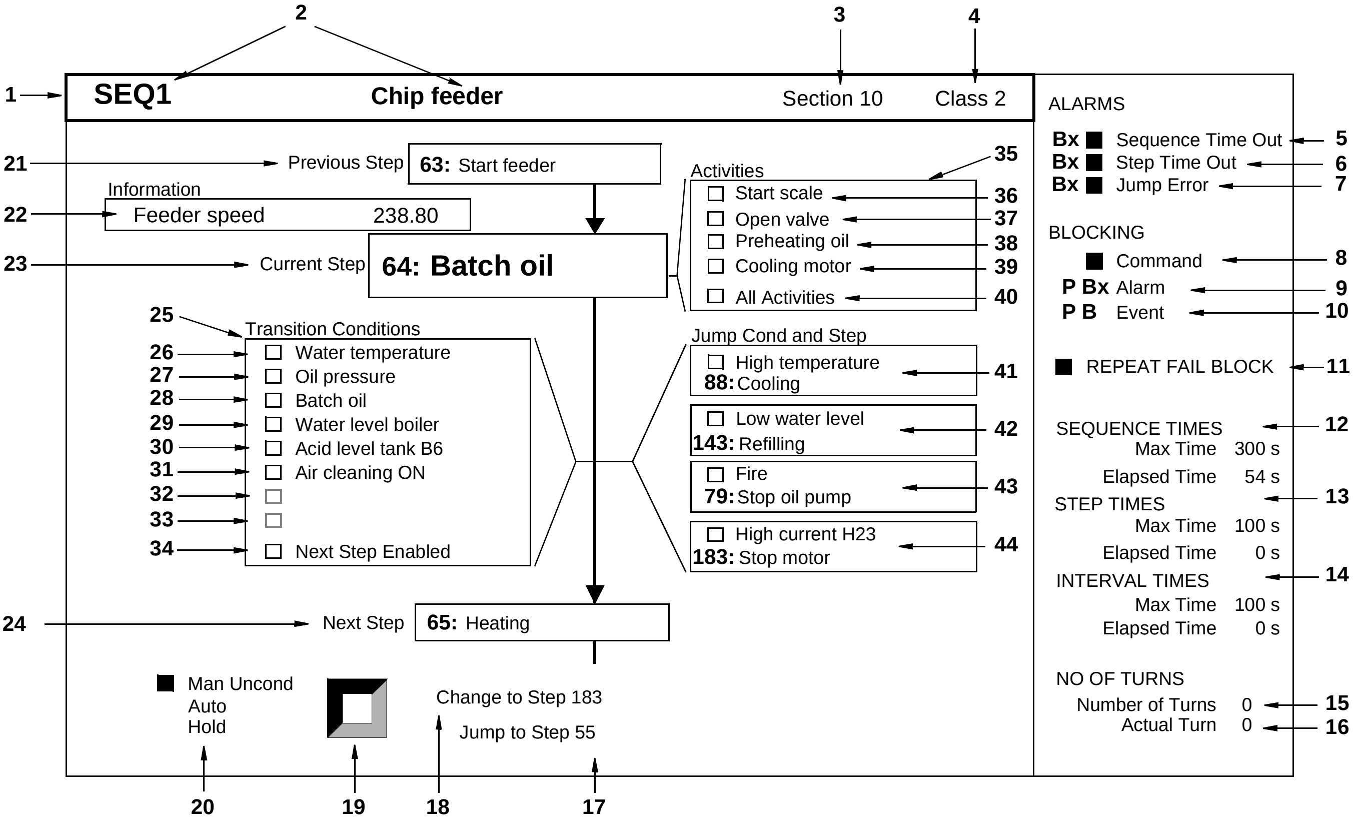
** The mode flags are mutually exclusive (except for UncondM), and the priority order is not applicable.*

The conditions are in priority order. Underlined parameters are configurable.

Parameters	Affects	Options (bold is default)	Remarks
NameFont	2. Header Name	**FC50**, any font	
ManModeColor	3.1 Mode	**K5** (Green), any color	

4.18.4 SEQOB01

Presentation:



Behavior:

No	Description	Presentation	Condition	Remarks
1	**SelectFrame**	White	SELECTED = 1	*Object select frame*
		Black	-	
2	**Header**		NAME and DESCR	*Object name and description*
		Red flashing	DI2_AL_UNACK = 1 or AU_POSN_F = 1 or AU_SERVUC = 1 or AU_SEQAL = 1 or AU_STEPAL = 1	*Unacknowledged alarm*
		Yellow	BLOCKED =1	*Command blocked*
		Red	DI2_DIST = 1	*Alarm*
		Green	-	*Normal*

No	Description	Presentation	Condition	Remarks
3.1	**Section Text**	**Section** Grey		*Text in front of the value*
3.2	**Section Value**	Green	PROC_SEC	*Process section*
4.1	**Class Text**	**Class** Grey		*Text in front of the value*
4.2	**Class Value**	Green	CLASS	*Object class*
5	**Sequence Time Out**			*Sequence Time Out*
5.1	**Alarm Blocked**	**B** Yellow	TF_AL_BLK = 1	*Alarm blocked by operator*
		Bx Yellow	TF_AL_P_BLK = 1	*Alarm blocked by PC-program*
5.2	**Alarm Indication**	■ Red flashing	AU_SEQAL = 1	*Unacknowledged alarm*
		■ Red	TS_SEQAL = 1	*Alarm*
5.3	**Sequence Time Out Text**	**Sequence Time Out**		*Text for Sequence Time Out*
		Red	AU_SEQAL = 1 or TS_SEQAL = 1	
		Grey	-	
6	**Step Time Out**			*Step Time Out*
6.1	**Alarm Blocked**	**B** Yellow	TF_AL_BLK = 1	*Alarm blocked by operator*
		Bx Yellow	TF_AL_P_BLK = 1	*Alarm blocked by PC-program*
6.2	**Alarm Indication**	■ Red flashing	AU_STEPAL = 1	*Unacknowledged alarm*
		■ Red	TS_STEPAL = 1	*Alarm*
6.3	**Step Time Out Text**	**Step Time Out**		*Text for Step Time Out*
		Red	AU_STEPAL = 1 or TS_STEPAL = 1	
		Grey	-	
7	**Jump Error**			*Jump Error*
7.1	**Alarm Blocked**	**B** Yellow	TF_AL_BLK = 1	*Alarm blocked by operator*
		Bx Yellow	TF_AL_P_BLK = 1	*Alarm blocked by PC-program*
7.2	**Alarm Indication**	■ Red flashing	AU_POSN_F = 1	*Unacknowledged alarm*
		■ Red	TS_POSN_F = 1	*Alarm*
7.3	**Jump Error Text**	**Jump Error** Red		*Text for Jump Error*
		Red	AU_POSN_F = 1 or TS_POSN_F = 1	
		Grey	-	
8	**Command Blocking**			*Command blocking*
8.1	**Command Block Indication**	■ Yellow	BLOCKED = 1	*Command blocked*
8.2	**Command Text**	**Command**		*Text for Command*
		Yellow	BLOCKED = 1	
		Grey	-	

No	Description	Presentation	Condition	Remarks
9	**Alarm Blocking**			*Alarm blocking*
9.1	**Printout Blocked**	**P** Yellow	DI1_PR_BLK = 1 and TF_PR_BLK = 1	*Printout blocked*
9.2	**Alarm Blocked**	**B** Yellow	TF_AL_BLK = 1	*Alarm blocked by operator*
		Bx Yellow	TF_AL_P_BLK = 1	*Alarm blocked by PC-program*
9.3	**Alarm Text**	**Alarm** Grey		*Text for Alarm*
10	**Event Blocking**			*Event blocking*
10.1	**Printout Blocked**	**P** Yellow	PT_PR_BLK = 1 and SI_PR_BLK = 1	*Printout blocked*
10.2	**Event Blocked**	**B** Yellow	PT_AL_BLK = 1 and SI_AL_BLK = 1	*Alarm blocked*
10.3	**Event Text**	**Event** Grey		*Text for Event*
11.1	**Repeat Fail Block Indication**	■ Yellow flashing	DI2_RP_F_BLK = 1	*Repeat fail blocked*
11.2	**Repeat Fail Block Text**	**REPEAT FAIL BLOCK**		*Text for REPEAT FAIL BLOCK*
		Yellow	DI2_RP_F_BLK = 1	
		Grey	-	
12	**SEQUENS TIMES**			*SEQUENS TIMES*
12.1	**Max Sequence Time Text**	**Max Time** Grey		*Max Time Text*
12.2	**Max Sequence Time**	Green	SEQTD	*Max Sequence Time*
12.3	**Elapsed Sequence Time Text**	**Elapsed Time** Grey		*Elapsed Time Text*
12.4	**Elapsed Sequence Time**	Green	SEQTE	*Elapsed Sequence Time*
13	**STEP TIMES**			*STEP TIMES*
13.1	**Max Step Time Text**	**Max Time** Grey		*Max Time Text*
13.2	**Max Step Time**	Green	STEPTD	*Max Step Time*
13.3	**Elapsed Step Time Text**	**Elapsed Time** Grey		*Elapsed Time Text*
13.4	**Elapsed Step Time**	Green	STEPTE	*Elapsed Step Time*
14	**INTERVAL TIMES**			*INTERVAL TIMES*
14.1	**Max Interval Time Text**	**Max Time** Grey		*Max Time Text*
14.2	**Max Interval Time**	Green	INTV_TDO	*Max Interval Time*
14.3	**Elapsed Interval Time Text**	**Elapsed Time** Grey		*Elapsed Time Text*
14.4	**Elapsed Interval Time**	Green	INTV_TE	*Elapsed Interval Time*

No	Description	Presentation	Condition	Remarks
	NO OF TURNS			*NO OF TURNS*
15.1	**Number of Turns Text**	**Number of Turns** Grey		*Number of Turns Text*
15.2	**Number of Turns**	Green	TURNSO	*Number of Turns*
16.1	**Actual Turn Text**	**Actual Turn** Grey		*Actual Turn Text*
16.2	**Actual Turn**	Green	ACT_TURN	*Actual Turn*
17.1	**Jump to Step Text**	**Jump to Step** Grey		*Jump to Step Text*
17.2	**Jump to Step Value**		JPOSO	*Jump to Step Value*
		Grey	MAN = 1	
		Dimmed Grey	MAN = 0	*Dimmed when unavailable*
18.1	**Change to Step Text**	**Change to Step** Grey		*Change to Step Text*
18.2	**Change to Step Value**	Green	NEXTSTEP	*Change to Step Value*
19	**Run Status Indication**	☒ Green	INTERLOCK = 1 and RUN = 0	*Not Ready for Start*
		⊟ Green	HOLD = 1	
		■ Green flashing	RUN = 1 and BUSY = 1	*Not-Completed*
		■ Green	RUN = 1	
		□ Green	RUN = 0	
20.1	**Manual Mode Indication**	■ Green filled	MAN = 1	*Manual mode*
		Man Green	MAN = 1	*Man text behind the indication*
		Man Grey	MAN = 0	
		Uncond Green	UNCOND = 1	*Manual unconditional mode*
20.2	**Auto mode**	■ Green filled	AUTO = 1	*Auto mode*
		Auto Green	AUTO = 1	*Auto text behind the indication*
		Auto Grey	AUTO = 0	
20.3	**Hold mode**	■ Yellow filled	HOLD = 1	*Hold mode*
		Hold Yellow	HOLD = 1	*Hold text behind the indication*
		Hold Grey	HOLD = 0	

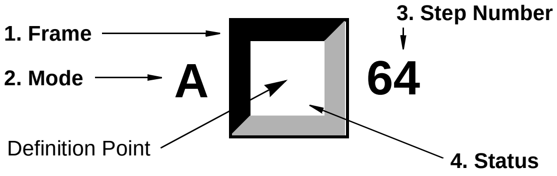
No	Description	Presentation	Condition	Remarks
21	**Previous Step Text**	**Previous Step** Grey		*Previous Step Text*
	Previous Step Box	Filled background Black	PREPOS <> 0	*Invisible when PREPOS = 0*
	Previous Step Number and Name		PREPOS **:** PRENAME	*Previous step number and name*
		Green	PREPOS <> 0	
22.1	**Information Text**	**Information** Grey		*Information Text*
22.2	**Information Box**	Filled background Black	BLANKINF = 0 and INFTXT <> ““	*Invisible when BLANKINF = 1*
22.3	**Information Text**		INFTXT	*Information text*
		Green	BLANKINF = 0 and INFTXT <> ““	
22.4	**Information Value**		INFVAL	*Information value*
		Green	BLANKINF = 0 and INFTXT <> ““	
23.1	**Current Step Text**	**Current Step** Grey		*Current Step Text*
23.2	**Current Step Box**	Filled background Black	POSN <> 0	*Invisible when POSN = 0*
23.3	**Current Step Number and Name**		POSN **:** STEPNAME	*Curr. step number and name*
		Green	POSN <> 0	
24.1	**Next Step Text**	**Next Step** Grey		*Next Step Text*
24.2	**Next Step Box**	Filled background Black	NXTPOS <> 0	*Invisible when NXTPOS = 0*
24.3	**Next Step Number and Name**		NXTPOS **:** NXTNAME	*Next step number and name*
		Green	NXTPOS <> 0	
25.1	**Transitions Condition Text**	**Transitions Condition** Grey		*Transitions Condition Text*
25.2	**Transition Condition Box**	Filled background Black	any CONDTXT# <> ““	*Invisible when no CONDTXT#*
26.1	**Transition Condition 1 Ind.**	☐ Green	CONDSTA1 = 0	
		■ Green	CONDSTA1 = 1	
26.2	**Transition Condition 1 Text**	CONDTXT1 Green	CONDTXT1 <> ““	*Invisible when no CONDTXT1*
27.1	**Transition Condition 2 Ind.**	☐ Green	CONDSTA2 = 0	
		■ Green	CONDSTA2 = 1	
27.2	**Transition Condition 2 Text**	CONDTXT2 Green	CONDTXT2 <> ““	*Invisible when no CONDTXT2*
28.1	**Transition Condition 3 Ind.**	☐ Green	CONDSTA3 = 0	
		■ Green	CONDSTA3 = 1	
28.2	**Transition Condition 3 Text**	CONDTXT3 Green	CONDTXT3 <> ““	*Invisible when no CONDTXT3*

No	Description	Presentation	Condition	Remarks
29.1	**Transition Condition 4 Ind.**	☐ Green	CONDSTA4 = 0	
		■ Green	CONDSTA4 = 1	
29.2	**Transition Condition 4 Text**	CONDTXT4 Green	CONDTXT4 <> ““	*Invisible when no CONDTXT4*
30.1	**Transition Condition 5 Ind.**	☐ Green	CONDSTA5 = 0	
		■ Green	CONDSTA5 = 1	
30.2	**Transition Condition 5 Text**	CONDTXT5 Green	CONDTXT5 <> ““	*Invisible when no CONDTXT5*
31.1	**Transition Condition 6 Ind.**	☐ Green	CONDSTA6 = 0	
		■ Green	CONDSTA6 = 1	
31.2	**Transition Condition 6 Text**	CONDTXT6 Green	CONDTXT6 <> ““	*Invisible when no CONDTXT6*
32.1	**Transition Condition 7 Ind.**	☐ Green	CONDSTA7 = 0	
		■ Green	CONDSTA7 = 1	
32.2	**Transition Condition 7 Text**	CONDTXT7 Green	CONDTXT7 <> ““	*Invisible when no CONDTXT7*
33.1	**Transition Condition 8 Ind.**	☐ Green	CONDSTA8 = 0	
		■ Green	CONDSTA8 = 1	
33.2	**Transition Condition 8 Text**	CONDTXT8 Green	CONDTXT8 <> ““	*Invisible when no CONDTXT8*
34.1	**Next Step Enabled Indication**	☐ Green	NXTCOND = 0	
		■ Green	NXTCOND = 1	
34.2	**Next Step Enabled Text**	**Next Step Enabled** Grey		*Next Step Enabled Text*
35.1	**Activities Text**	**Activities** Grey		*Activities Text*
35.2	**Activities Box**	Filled background Black	any ACTTXT# <> ““	*Invisible when no ACTTXT#*
36.1	**Activity 1 Indication**	☐ Green	ACTSTA1 = 0	
		■ Green	ACTSTA1 = 1	
36.2	**Activity 1 Text**	ACTTXT1 Green	ACTTXT1 <> ““	*Invisible when no ACTTXT1*
37.1	**Activity 2 Indication**	☐ Green	ACTSTA2 = 0	
		■ Green	ACTSTA2 = 1	
37.2	**Activity 2 Text**	ACTTXT2 Green	ACTTXT2 <> ““	*Invisible when no ACTTXT2*
38.1	**Activity 3 Indication**	☐ Green	ACTSTA3 = 0	
		■ Green	ACTSTA3 = 1	
38.2	**Activity 3 Text**	ACTTXT3 Green	ACTTXT3 <> ““	*Invisible when no ACTTXT3*
39.1	**Activity 4 Indication**	☐ Green	ACTSTA4 = 0	
		■ Green	ACTSTA4 = 1	
39.2	**Activity 4 Text**	ACTTXT4 Green	ACTTXT4 <> ““	*Invisible when no ACTTXT4*

No	Description	Presentation	Condition	Remarks
40.1	**All Activities Indication**	☐ Green	ALLACT = 0	
		■ Green	ALLACT = 1	
40.2	**All Activities Text**	**All Activities** Grey		*All Activities Text*
41	**Jump Cond and Step Text**	**Jump Cond and Step** Grey		*Jump Cond and Step Text*
41.1	**Jump Condition 1 Box**	Filled background Black	JCTXT1 <> ““	*Hollow when no JCTXT1*
41.2	**Jump Condition 1 Indication**	☐ Green	JCSTA1 = 0	
		■ Green	JCSTA1 = 1	
41.3	**Jump Condition 1 Text**	JCTXT1 Green	JCTXT1 <> ““	*Invisible when no JCTXT1*
41.4	**Jump Step 1 Number and Name**		JPOS1 **:** JNAME1	*Jump step number and name*
		Green	JCTXT1 <> 0	*Invisible when no JCTXT1*
42.1	**Jump Condition 2 Box**	Filled background Black	JCTXT2 <> ““	*Hollow when no JCTXT2*
42.2	**Jump Condition 2 Indication**	☐ Green	JCSTA2 = 0	
		■ Green	JCSTA2 = 1	
42.3	**Jump Condition 2 Text**	JCTXT2 Green	JCTXT2 <> ““	*Invisible when no JCTXT2*
42.4	**Jump Step 2 Number and Name**		JPOS2 **:** JNAME2	*Jump step number and name*
		Green	JCTXT2 <> 0	*Invisible when no JCTXT2*
43.1	**Jump Condition 3 Box**	Filled background Black	JCTXT3 <> ““	*Hollow when no JCTXT3*
43.2	**Jump Condition 3 Indication**	☐ Green	JCSTA3 = 0	
		■ Green	JCSTA3 = 1	
43.3	**Jump Condition 3 Text**	JCTXT3 Green	JCTXT3 <> ““	*Invisible when no JCTXT3*
43.4	**Jump Step 3 Number and Name**		JPOS23 **:** JNAME3	*Jump step number and name*
		Green	JCTXT3 <> 0	*Invisible when no JCTXT3*
44.1	**Jump Condition 4 Box**	Filled background Black	JCTXT4 <> ““	*Hollow when no JCTXT4*
44.2	**Jump Condition 4 Indication**	☐ Green	JCSTA4 = 0	
		■ Green	JCSTA4 = 1	
44.3	**Jump Condition 4 Text**	JCTXT4 Green	JCTXT4 <> ““	*Invisible when no JCTXT4*
44.4	**Jump Step 4 Number and Name**		JPOS4 **:** JNAME4	*Jump step number and name*
		Green	JCTXT24 <> 0	*Invisible when no JCTXT4*

4.18.5 SEQPD01

Presentation:



Behavior:

No	Description	Presentation	Condition	Remarks
1	**SelectFrame**	White	SELECTED = 1	*Selected*
		Dotted Yellow	DI1_AL_BLK = 1	*Alarm blocked by operator*
		Black	-	
2	**Mode***		ModeVis = true	*Object mode*
		M Green	MAN = 1	*Manual mode* ManColor
		A Green	AUTO =1	*Auto mode* AutoColor
		H Yellow	HOLD =1	*Hold mode* HoldTextColor
		-	ModeVis = false	*Mode is invisible*
3	**Current Step Number**		StepPosVis = true	*Current Step Number*
			POSN	*Invisible when POSN = 0*
		Green	POSN <> 0	StepTextColor
		-	StepPosVis = false	*Step Number is invisible*

No	Description	Presentation	Condition	Remarks
4	**Run Status Indication** shape	☒	INTERLOCK = 1 and RUN = 0	*Not Ready for Start*
		⊟	HOLD = 1	
		■	RUN = 1	
		□	RUN = 0	
	color:	Red flashing	DI2_AL_UNACK =1 or AU_POSN_F = 1 or AU_SERVUC = 1 or AU_SEQAL = 1 or AU_STEPAL = 1	
		Yellow	BLOCKED = 1	
		Red	DI2_DIST	
		Green flashing	RUN = 1 and BUSY = 1	*Filled symbol, see above.*
		Green	-	

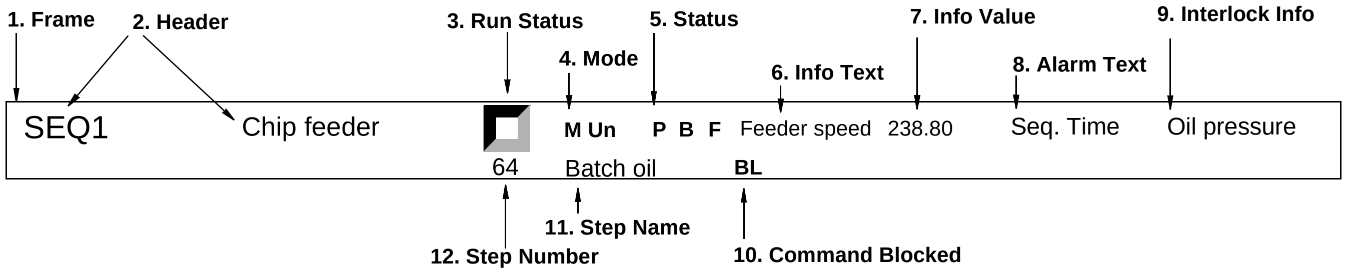
** Unconditional mode is not shown*

The conditions are in priority order. Underlined parameters are configurable.

Parameters	Affects	Options (bold is default)	Remarks
StepPosVis	3. Current Step Number	**true**, false	*Step Number is visible*
ModeVis	2. Mode	**true**, false	*Mode string is visible*
StepTextColor	3. Current Step Number	**K5** (Green), any color	
AutoColor	2. Mode	**K5** (Green), any color	*Color of mode when in Auto*
ManColor	2. Mode	**K5** (Green), any color	*Color of mode when in Man*
HoldTextColor	2. Mode	**K3** (Yellow), any color	*Color of mode when in Hold*
Font	2. Mode and 3. Current Step Number	**FA40**, any font	*Texts*
UseDisplayColor	2. Mode	**false**, true	*true if DisplayColor used*
DisplayColor	2. Mode	**N13** (Black), any color	*Bg for Mode if UseDisplayColor is true*

4.18.6 SEQSG01

Presentation:



Behavior:

No	Description	Presentation	Condition	Remarks
1	**SelectFrame**	White	SELECTED = 1	*Object select frame*
		Black	-	FrameColor
2	**Header**		NAME and DESCR	*Object name and description*
		Red flashing	DI2_AL_UNACK = 1 or AU_POSN_F = 1 or AU_SERVUC = 1 or AU_SEQAL = 1 or AU_STEPAL = 1	*Unacknowledged alarm*
		Yellow	BLOCKED =1	*Command blocked*
		Red	DI2_DIST = 1	*Alarm*
		Green	-	*Normal*
3	**Run Status Indication**	⊠ Green	INTERLOCK = 1 and RUN = 0	*Not Ready for Start*
		⊟ Green	HOLD = 1	
		■ Green flashing	RUN = 1 and BUSY = 1	*Not-Completed*
		■ Green	RUN = 1	
		□ Green	RUN = 0	
4	**Mode**	**M Un** Green	MAN = 1 and UNCOND = 1	*Manual mode* ManModeColor
		M Green	MAN = 1	*Manual mode* ManModeColor
		A Green	AUTO = 1	*Auto mode*
		HOLD Yellow	HOLD = 1	*Hold mode*

No	Description	Presentation	Condition	Remarks
5	**Printout Blocked**	**P** Yellow	TF_PR_BLK = 1	*Printout blocked*
	Alarm Blocked	**B** Yellow	DI1_AL_BLK = 1	*Alarm blocked by operator*
		Bx Yellow	DI1_AL_P_BLK = 1	*Alarm blocked by PC-program*
	Fault Indication	**F** Red	DI2_DIST = 1	*Alarm*
6	**Information Text**		INFTXT	*Information text*
		Grey	BLANKINF = 0	*Invisible when BLANKINF = 1*
7	**Information Value**		INFVAL	*Information value*
		Grey	BLANKINF = 0 and INFTXT <> ““	*Invisible when BLANKINF = 1*
8	**Alarm Text**	**? ? ?** Yellow flashing	DI2_RP_F_BLK = 1	*Repeat fail block*
		-	DI1_AL_BLK = 1 or DI1_AL_P_BLK = 1	*Alarm blocked by operator or* *Alarm blocked by PC-program*
		Jump Error Red	TS_POSN_F = 1	
		Seq. Time Red	TS_SEQAL = 1	
		Step Time Red	TS_STEPAL = 1	
9	**Interlock Info Text**	**Next Step Enabled** Green	NXTCOND = 1	
		CONDTXT1 Yellow	CONDTXT1 <> ‘’ and CONDSTA1 = 0	*Condition 1 exists but is not satisfied.*
		CONDTXT2 Yellow	CONDTXT2 <> ‘’ and CONDSTA2 = 0	*Condition 2 exists but is not satisfied.*
		CONDTXT3 Yellow	CONDTXT3 <> ‘’ and CONDSTA3 = 0	*Condition 3 exists but is not satisfied*
		CONDTXT4 Yellow	CONDTXT4 <> ‘’ and CONDSTA4 = 0	*Condition 4 exists but is not satisfied*
		CONDTXT5 Yellow	CONDTXT5 <> ‘’ and CONDSTA5 = 0	*Condition 5 exists but is not satisfied*
		CONDTXT6 Yellow	CONDTXT6 <> ‘’ and CONDSTA6 = 0	*Condition 6 exists but is not satisfied*
		CONDTXT7 Yellow	CONDTXT7 <> ‘’ and CONDSTA7 = 0	*Condition 7 exists but is not satisfied*
		CONDTXT8 Yellow	CONDTXT8 <> ‘’ and CONDSTA8 = 0	*Condition 8 exists but is not satisfied*

No	Description	Presentation	Condition	Remarks
10	**Command Blocked**	**BL** Yellow	BLOCKED = 1	*Command blocked*
11	**Current Step Name**		STEPNAME	*Invisible when POSN = 0*
		Green	POSN <> 0	
12	**Current Step Number**		POSN	*Invisible when POSN = 0*
		Green	POSN <> 0	

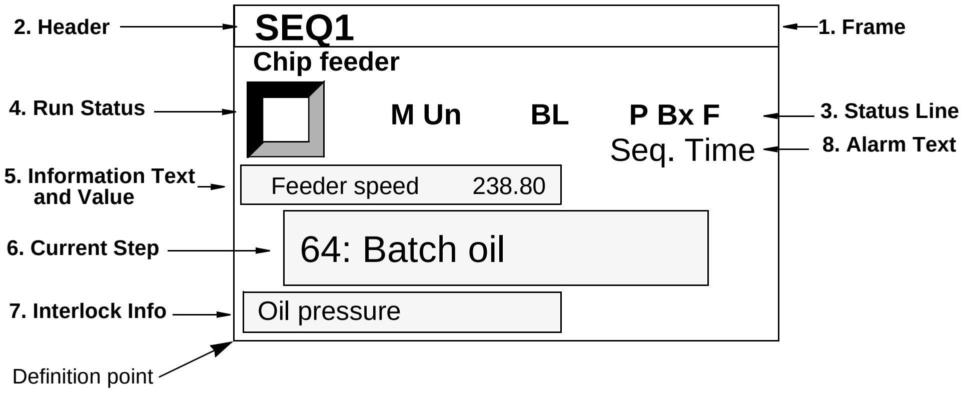
The conditions are in priority order. Underlined parameters are configurable.

Configuration:

Parameters	Affects	Options (bold is default)	Remarks
FrameColor	1. SelectFrame	**K16** (Black), any color	
NameFont	2. Header Name	**FC50**, any font	
ManModeColor	4. Mode	**K5** (Green), any color	

4.18.7 SEQWI01

Presentation:



Behavior:

No	Description	Presentation	Condition	Remarks
1	**Select Frame**			*Object select frame*
		White	SELECTED = 1	*Only for overlap*
		Black	-	
2	**Header**		NAME and DESCR	*Object name and description*
		Red flashing	DI2_AL_UNACK = 1 or AU_POSN_F = 1 or AU_SERVUC = 1 or AU_SEQAL = 1 or AU_STEPAL = 1	*Unacknowledged alarm*
		Yellow	BLOCKED =1	*Command blocked*
		Red	DI2_DIST = 1	*Alarm*
		Green	-	*Normal*
3	**Status Line**			*Status Line*
3.1	**Mode***	**M Un** Green	MAN = 1 and UNCOND = 1	*Manual mode*
		M Green	MAN = 1	*Manual mode*
		A Green	AUTO = 1	*Auto mode*
		HOLD Yellow	HOLD = 1	*Hold mode*

No	Description	Presentation	Condition	Remarks
3.2	**Printout Blocked**	**P** Yellow	TF_PR_BLK = 1	*Printout blocked*
3.3	**Alarm Blocked**	**B** Yellow	DI1_AL_BLK = 1	*Alarm blocked by operator*
		Bx Yellow	DI1_AL_P_BLK = 1	*Alarm blocked by PC-program*
3.4	**Fault Indication**	**F** Red	DI2_DIST = 1	*Alarm*
3.5	**Command Blocked**	**BL** Yellow	BLOCKED = 1	*Command blocked*
4	**Run Status Indication**	☒ Green	INTERLOCK = 1 and RUN = 0	*Not Ready for Start*
		⊟ Green	HOLD = 1	
		■ Green flashing	RUN = 1 and BUSY = 1	*Not-Completed*
		■ Green	RUN = 1	
		□ Green	RUN = 0	
5	**Information Box**	Filled background Black	BLANKINF = 0 and INFTXT <> ""	*Invisible when BLANKINF = 1*
	Information Text		INFTXT	*Information text*
		Grey	BLANKINF = 0	
	Information Value		INFVAL	*Information value*
		Grey	BLANKINF = 0 and INFTXT <> ""	
6	**Current Step Box**	Filled background Black	POSN <> 0	*Invisible when POSN = 0*
	Current Step Number and Name		POSN **:** STEPNAME	*Current step number and name*
		Green	POSN <> 0	

No	Description	Presentation	Condition	Remarks
7	**Interlock Info Text**	**Next Step Enabled** Green	NXTCOND = 1	
		CONDTXT1 Yellow	CONDTXT1 <> ‘’ and CONDSTA1 = 0	*Condition 1 exists but is not satisfied*
		CONDTXT2 Yellow	CONDTXT2 <> ‘’ and CONDSTA2 = 0	*Condition 2 exists but is not satisfied*
		CONDTXT3 Yellow	CONDTXT3 <> ‘’ and CONDSTA3 = 0	*Condition 3 exists but is not satisfied*
		CONDTXT4 Yellow	CONDTXT4 <> ‘’ and CONDSTA4 = 0	*Condition 4 exists but is not satisfied*
		CONDTXT5 Yellow	CONDTXT5 <> ‘’ and CONDSTA5 = 0	*Condition 5 exists but is not satisfied*
		CONDTXT6 Yellow	CONDTXT6 <> ‘’ and CONDSTA6 = 0	*Condition 6 exists but is not satisfied*
		CONDTXT7 Yellow	CONDTXT7 <> ‘’ and CONDSTA7 = 0	*Condition 7 exists but is not satisfied*
		CONDTXT8 Yellow	CONDTXT8 <> ‘’ and CONDSTA8 = 0	*Condition 8 exists but is not satisfied*
8	**Alarm Text:**	**? ? ?** Yellow flashing	DI2_RP_F_BLK = 1	*Repeat fail block*
		-	DI1_AL_BLK = 1 or DI1_AL_P_BLK = 1	*Alarm blocked by operator or* *Alarm blocked by PC-program*
		Jump Error Red	TS_POSN_F = 1	
		Seq. Time Red	TS_SEQAL = 1	
		Step Time Red	TS_STEPAL = 1	

** The mode flags are mutually exclusive (except for UncondM), and the priority order is not applicable.*

The conditions are in priority order.

4.19 Dialog for TREND

4.19.1 MIN Dialog (No authority key)

4.19.1.1 Keyboard keys

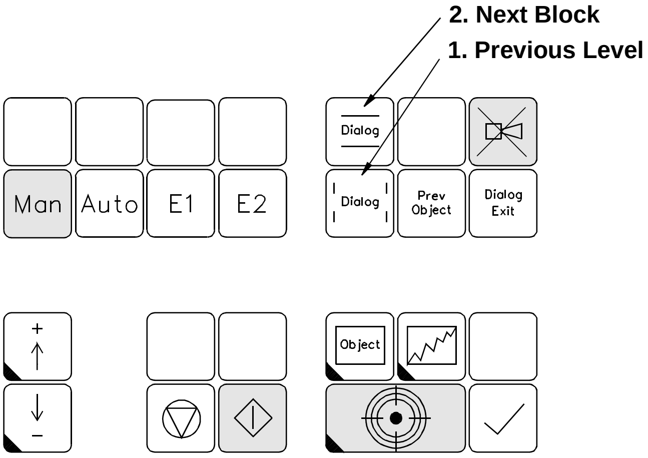


Figure 4-117. Keyboard keys

Key 1: Previous Level	Select Dynamic keys: Top Level or Traces from Configuration if multi- or object trend
Key 2: Next Block	Page between the dynamic key sets: Top Level, Scope and Trace levels

4.19.1.2 Dynamic keys, Top Level

D1 << Scope	D2 Scope >>	D3 Select Time	D4 < Ruler	D5 Ruler >
D6	D7	D8 Set Scope...	D9 Traces...	D10

Figure 4-118. Dynamic keys, Top Level

D1: << Scope	Perform: Move time axis 80% backward
D2: Scope >>	Perform: Move time axis 80% forward
D3: Select Time	Select: Dialog to select beginning of time scope
D4: < Ruler	Perform: Move the ruler one log interval (resolution) backward
D5: Ruler >	Perform: Move the ruler one log interval (resolution) forward
D8: Set Scope...	Select Dynamic keys: Set Scope
D9: Traces...	Select Dynamic keys: Trace

4.19.1.3 Dynamic keys, Set Scope for single trend

D1 << Scope	D2 Scope >>	D3 Select Time	D4 < Scope	D5 Scope >
D6	D7	D8	D9	D10

Figure 4-119. Dynamic keys, Set Scope for single trend

D1: << Scope	Perform: Move time axis 80% backward
D2: Scope >>	Perform: Move time axis 80% forward
D3: Select Time	Select: Dialog to select beginning of time scope
D4: < Scope	Perform: Move time axis 20% backward
D5: Scope >	Perform: Move time axis 20% forward

4.19.1.4 Dynamic keys, Set Scope for multi and object trend

D1 << Scope	D2 Scope >>	D3 Select Time	D4 < Scope	D5 Scope >
D6 1 h	D7 4 h	D8 8 h	D9 1 d	D10 2 d

Figure 4-120. Dynamic keys, Set Scope for multi trend and object trend

D1: << Scope	Perform: Move time axis 80% backward
D2: Scope >>	Perform: Move time axis 80% forward
D3: Select Time	Select: Dialog to select beginning of time scope
D4: < Scope	Perform: Move time axis 20% backward
D5: Scope >	Perform: Move time axis 20% forward
D6: 1 h	Perform: Set the time interval for the presentation to 1 hour
D7: 4 h	Perform: Set the time interval for the presentation to 4 hours
D8: 8 h	Perform: Set the time interval for the presentation to 8 hours
D9: 1 d	Perform: Set the time interval for the presentation to 1 day
D10: 2 d	Perform: Set the time interval for the presentation to 2 days

Note: The time ranges for D6 to D10 are the default values.
These values can be changed for multi trend displays in the Display Builder.

4.19.1.5 Dynamic keys, Traces

D1 # Y Max 120	D2 Hide Trace	D3	D4	D5 Next Trace
D6 # Y Min 0	D7 Show Trace	D8	D9 Select	D10 Configuration...

Figure 4-121. Dynamic keys, Traces

D1: Y Max	Perform: Dialog to set max range for y scale A # indication means that the default value has been changed.
D2: Hide Trace	Perform: Hide selected trace
D5: Next Trace	Perform: Select next trace
D6: Y Min	Perform: Dialog to set min range for y scale A # indication means that the default value has been changed.
D7: Show Trace	Perform: Show selected trace
D9: Select	Perform: Select the object for the selected trace
D10: Configuration...	Select Dynamic keys: Configuration

Note: If you want the default max- and min value back, enter max = min via the dialog.
D10 Configuration is only valid for multi trend and object trend.
For multi trend you can configure the display depending on how
RuntimeChangeable and MindialogChangeable is set in the display builder.
For single trend the key is dimmed.

4.19.1.6 Dynamic keys, Configuration

D1 MV	D2 OUT	D3 SP	D4 DEV	D5 ACT
D6	D7	D8	D9 Delete	D10 Break

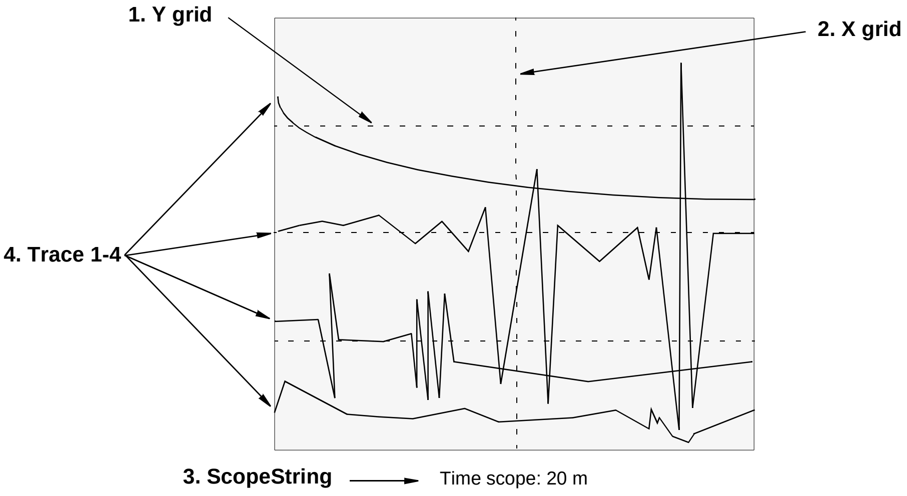
Figure 4-122. Dynamic keys, Configuration

D1 - D5:	Perform: Choice of object attribute
D9: Delete	Perform: Delete of chosen trace
D10: Break	Perform: Break the dialog and return to the above level

Note: D1 to D5 shows the attribute for the selected object.
If the attribute is not logged the dynamic key is dimmed.

4.19.2 HSPD01

Presentation:



Behavior:

No	Description	Presentation	Condition	Remarks
1	**Y grid**			*Spacing is configurable*
		Grey	YGridVis = true	GridColor
2	**X grid**			*Spacing is configurable*
		Grey	XGridVis = true	GridColor
3	**Scope String**		ScopeStringVis = true	*User defined text* *ScopeString is visible*
		Grey	ScopeString	ScopeColor and ScopeFont
		-	ScopeStringVis = false	*ScopeString is invisible*
4	**Presentation of Trace 1 - Trace 4**			*Polygon, growing from left to right.* TraceThickness
4.1	**Trace 1**	Green	HSLogName1 = History log name for trace 1	Color1
4.2	**Trace 2**	Cyan	HSLogName2 = History log name for trace 2	Color2
4.3	**Trace 3**	Magenta	HSLogName3 = History log name for trace 3	Color3
4.4	**Trace 4**	Dark Blue	HSLogName4 = History log name for trace 4	Color4

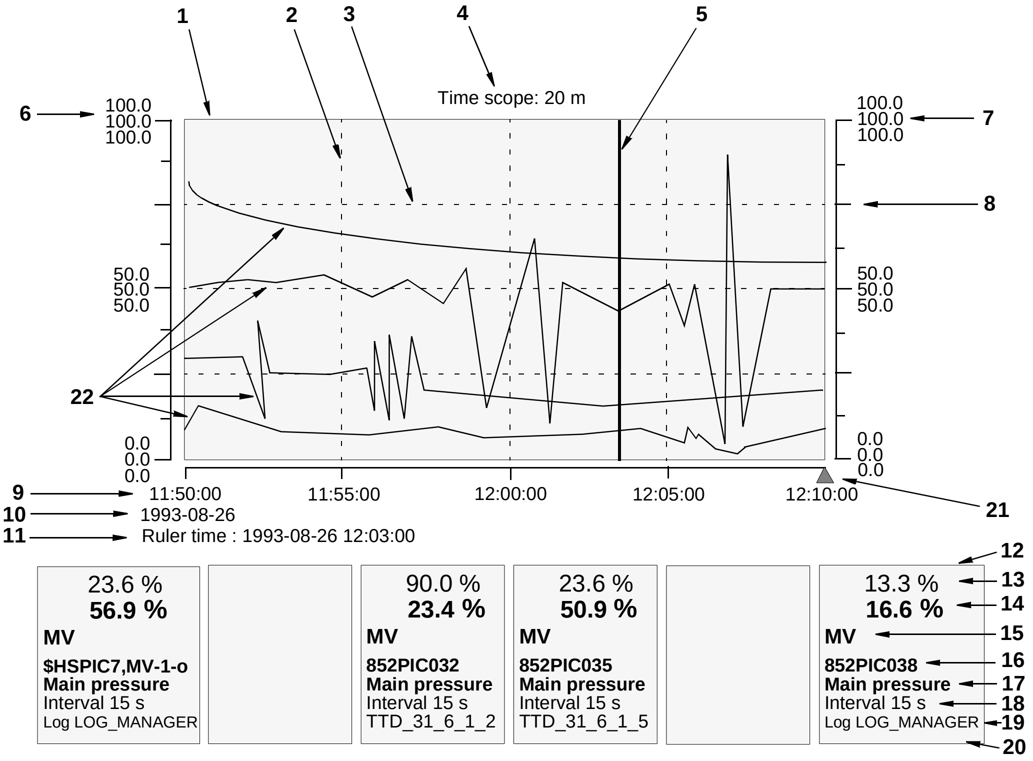
Underlined parameters are configurable.

Configuration:

Parameters	Affects	Options (bold is default)	Remarks
TimeScope		**900**, (>= 2 x Resolution)	*Size of the trend area in seconds*
Resolution		**15**, (> 0)	*Trace resolution (interval) in seconds*
HSLogName1 HSLogName2 HSLogName3 HSLogName4	4.1 Trace 1 4.2 Trace 2 4.3 Trace 3 4.4 Trace 4	**!HS_Dummy** - No Trace **!HS_Dummy** - No Trace **!HS_Dummy** - No Trace **!HS_Dummy** - No Trace	*Name of History log or access name for Trace 1.* *Trace 2.* *Trace 3.* *Trace 4.*
domain1 domain2 domain3 domain4	4.1 Trace 1 4.2 Trace 2 4.3 Trace 3 4.4 Trace 4		*Domain in where to look for log* *192-net-nod-0 = dedicated node* *empty = all nodes* *Should be specified when more than one IMS exist on the control network*
Color1	4.1 Trace 1	**K5** (Green), any color	*Color of the 1. Trace*
Color2	4.2 Trace 2	**K9** (Cyan), any color	*Color of the 2. Trace*
Color3	4.3 Trace 3	**K11** (Magenta), any color	*Color of the 3. Trace*
Color4	4.4 Trace 4	**C1** (Dark Blue), any color	*Color of the 4. Trace*
ScopeStringVis	3. ScopeString	**true**, (false)	
ScopeColor	3. ScopeString	**M16** (Grey), any color	
ScopeFont	3. ScopeString	**FC20,** any font	
ScopeString	3. ScopeString	“ “, empty string	*User defined text*
BackGround	4. Presentation of Trace1 - Trace4	**K16** (Black), any color	*Background color of the trend area*
UpdateScope		**0**	*Size of the update area in seconds*
YGridVis	1. Y grid	**1**, (0)	*Visibility of the horizontal grid lines*
yMajorTicks		**5**	*Number of major ticks on y axis*
XGridVis	2. X grid	**1**, (0)	*Visibility of the vertical grid lines*
xMajorTicks		**2**	*Number of minor ticks on x axis*
GridColor	2. Y grid and 3. X grid	**M16** (Grey), any color	*Color of the grid*
TraceThickness	4. Presentation of Trace1 - Trace4	**1**, (1...4)	*Thickness of the Trace1 - Trace4*

4.19.3 HSTD01

Presentation:



Behavior:

No	Description	Presentation	Condition	Remarks
1	**SelectFrame**	White		*Indicates dialog is active* selectColor
		Black		
2	**X grid**	Grey	XGridVis = true	*Spacing follows time axis* GridColor
3	**Y grid**	Grey	YGridVis = true	*Spacing is configurable* GridColor
4	**TimeScope**			*TimeScope*
4.1		**Time scope:** Grey		*Text in front of value*
4.2		Grey	TimeScope	*TimeScope value*
5	**Ruler**	White	RulerColor	*Activated by press in trend area*
6	**Left Y axis**	Grey		
6.1	**Y axis scale Trace 1**	Green		Color1
6.2	**Y axis scale Trace 2**	Cyan		Color2
6.3	**Y axis scale Trace 3**	Magenta		Color3

No	Description	Presentation	Condition	Remarks
7	**Right Y axis**	Grey		
7.1	**Y axis scale Trace 4**	Dark Blue		Color4
7.2	**Y axis scale Trace 5**	Orange		Color5
7.3	**Y axis scale Trace 6**	Yellow		Color6
8	**Y axis major ticks**	Grey		yMajorTicks
9	**Time axis**	Grey	hour:minute:second	*Tick spacing is calculated to give number of ticks <= 10* XColor.
10	**Date**	Grey	year-month-day	XColor
11	**Ruler time**	-	Ruler is invisible	*Ruler is inactive*
				Ruler is active
		Ruler time : White		*Text in front of Date and Time*
		White	year-month-day hour:minute:second	*Date and Time* RulerColor
12	**SelectFrame Trace 6**	White	The trace is active	*Frame round active trace*
		-	Trace inactive	*Invisible*
13	**Ruler read out value Trace 6**		The trace is active	*Value at ruler time*
		-	Ruler is invisible	*Ruler is inactive*
			The trace is active	*Ruler is active*
		************ White	Log entry status = BAD_DATA or Log entry status = NO_DATA	*Bad Ruler value or No Ruler value*
		White	VALUE	*Ruler value* RulerColor
		White	UNIT	*EngineeringUnit* RulerColor
14	**Read out value Trace 6**		The trace is active	*Value at most recent time in scope.*
		-	Log entry status = BAD_DATA or Log entry status = NO_DATA	*Value invisible*
		Yellow	VALUE	*Current Value* Color6
		Yellow	UNIT	*EngineeringUnit* Color6
15	**Attribute Trace 6**	Yellow	AttributeName6	*The log source object attribute* Color6
16	**Object Name Trace 6**	Yellow	ObjectName6	*Name of log source object* Color6
17	**Object Description Trace 6**	Yellow	The trace is defined	*Description of log source object* Color6
18	**Storage Interval Trace 6**	Grey	The trace is defined	

No	Description	Presentation	Condition	Remarks
19	**LogName Trace 6**	Grey	The trace is defined	*Name of log object.*
20	**SelectArea Trace 6**	Black		*This area is select sensitive and will start dialog at TRACE level.* BackGround
21	**Present Time Indication**	Filled triangle, Grey		*Visible when the right most time in the scope is present time.*
22	**Presentation of Trace 1 - Trace 6**			*Polygon, growing from left to right. Line thickness is configurable. Color = Black in areas with data status = BAD_DATA or NO_DATA.* BackGround
22.1	**Trace 1**	Green	ObjectName1, AttributeName1	Color1
22.2	**Trace 2**	Cyan	ObjectName2	*Invisible* Color2
22.3	**Trace 3**	Magenta	ObjectName3, AttributeName3	Color3
22.4	**Trace 4**	Dark Blue	ObjectName4, AttributeName4	Color4
22.5	**Trace 5**	Orange	ObjectName5	*Invisible* Color5
22.6	**Trace 6**	Yellow	ObjectName6, AttributeName6	Color6

The conditions are in priority order. Underlined parameters are configurable.

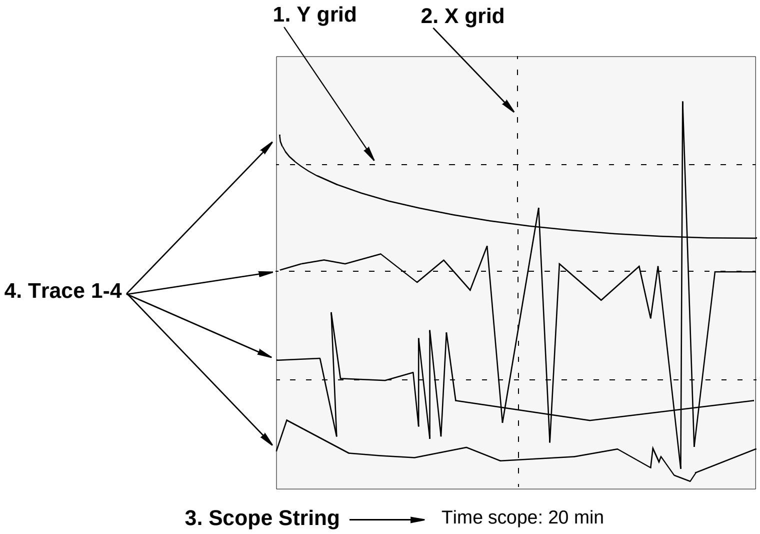
Configuration:

Parameters	**Affects**	**Options (bold is default)**	**Remarks**
TimeScope	4. TimeScope and 10. Time axis	**3600**	*Size of the trend area in seconds*
Resolution	9. Time axis	**15**	*Trace resolution (interval) in seconds*
AttributeName1 AttributeName2 AttributeName3 AttributeName4 AttributeName5 AttributeName6	15. Attribute Trace 1-6		*Source object attribute for the traces* *1. -* *2. VALUE, Attribute name* *3. -* *4. -* *5. -* *6. MV, Attribute name*
ObjectName1 ObjectName2 ObjectName3 ObjectName4 ObjectName5 ObjectName6	16. Object Name Trace 1-6		*Name of the source object for the traces* *1. Log name containing of $HS objectname,attribute name - hierarchical order - original. Example $HSAIC4,VALUE-1-o* *2. Object name and attribute name. Example 852PIC032* *3. User defined access name of History log. Example MY_LOG.* *4. TTD name. The TTD log has to be mapped in the IMS. A TTD log will be presented. Example TTD_31_6_1_9* *5. Access name, attribute name. Example AI4,VALUE* *6. Object name and attribute name. Since the attribute name doesn’t correspond with the attribute name in the history log ($HSAIC4,VALUE-1-o), the TTD log will be presented instead.*
domain1 domain2 domain3 domain4 domain5 domain6			*Domain in where to look for log* *192-net-nod-0 = dedicated node* *empty = all nodes* *Should be specified when more than one IMS exist on the control network*
RulerColor	5,11 and 13. Ruler Time and Value	**L16** (Grey), any color	*Color of the ruler Time and Date*
YGridVis	3. Y grid	**1**, (0)	*Visibility of the horizontal grid lines*
yMajorTicks	8. Y axis major ticks	**5**	*Number of major ticks on y axis*
XGridVis	2. X grid	**1**, (0)	*Visibility of the vertical grid lines*

Parameters	**Affects**	**Options (bold is default)**	**Remarks**
GridColor	2. Y grid and 3. X grid	**M16** (Grey), any color	*Color of the grid*
LineThickness1	22.1 Trace 1	**2.0**	*Thickness of the 1. Trace*
LineThickness2	22.2 Trace 2	**2.0**	*Thickness of the 2. Trace*
LineThickness3	22.3 Trace 3	**2.0**	*Thickness of the 3. Trace*
LineThickness4	22.4 Trace 4	**2.0**	*Thickness of the 4. Trace*
LineThickness5	22.5 Trace 5	**2.0**	*Thickness of the 5. Trace*
LineThickness6	22.6 Trace 6	**2.0**	*Thickness of the 6. Trace*
Color1	6.1, 14 - 17, 22.1	**K5** (Green), any color	*Color of the 1. Trace*
Color2	6.2, 14 - 17, 22.2	**K9** (Cyan), any color	*Color of the 2. Trace*
Color3	6.3, 14 - 17, 22.3	**K11** (Magenta), any color	*Color of the 3. Trace*
Color4	7.1, 14 - 17, 22.4	**C1** (Dark Blue), any color	*Color of the 4. Trace*
Color5	7.2, 14 - 17, 22.5	**G3** (Orange), any color	*Color of the 5. Trace*
Color6	7.3, 14 - 17, 22.6	**K3** (Yellow), any color	*Color of the 6. Trace*
noOfDecimals1	6.1 Y axis scale Trace 1	**3,** (0..4)	*Number of decimals in read out values of the 1. Trace*
noOfDecimals2	6.2 Y axis scale Trace 2	**3,** (0..4)	*Number of decimals in read out values of the 2. Trace*
noOfDecimals3	6.3 Y axis scale Trace 3	**3,** (0..4)	*Number of decimals in read out values of the 3. Trace*
noOfDecimals4	7.1 Y axis scale Trace 4	**3,** (0..4)	*Number of decimals in read out values of the 4. Trace*
noOfDecimals5	7.2 Y axis scale Trace 5	**3,** (0..4)	*Number of decimals in read out values of the 5. Trace*
noOfDecimals6	7.3 Y axis scale Trace 6	**3,** (0..4)	*Number of decimals in read out values of the 6. Trace*
XColor	9. Time axis and 11. Date	**M16** (Grey), any color	*Color of the X axis*
selectColor	1. SelectFrame	**L16** (White), any color	*Color indicating presentation is selected*
BackGround	20. SelectArea	**K16** (Black), any color	*Background color of the trend area*
Alignment		**60**	*Alignment of the X axis labels in seconds*
UpdateScope		**0**	*Size of the update area in seconds*

4.19.4 TRPD01

Presentation:



Behavior:

No	Description	Presentation	Condition	Remarks
1	**Y grid**			*Spacing is configurable*
		Grey	YGridVis = true	GridColor
2	**X grid**			*Spacing is configurable*
		Grey	XGridVis = true	GridColor
3	**Scope String**		ScopeStringVis = true	*User defined text* *ScopeString is visible*
		Grey	ScopeString	ScopeColor and ScopeFont
		-	ScopeStringVis = false	*ScopeString is invisible*
4	**Presentation of Trace 1 - Trace 4**			*Polygon, growing from left to right.* TraceThickness
4.1	**Trace 1**	Green	TTDName1 = TTD_Net_Node_Log_Index	Color1
4.2	**Trace 2**	Cyan	TTDName2 = TTD_Net_Node_Log_Index	Color2
4.3	**Trace 3**	Magenta	TTDName3 = TTD_Net_Node_Log_Index	Color3
4.4	**Trace 4**	Dark Blue	TTDName4 = TTD_Net_Node_Log_Index	Color4

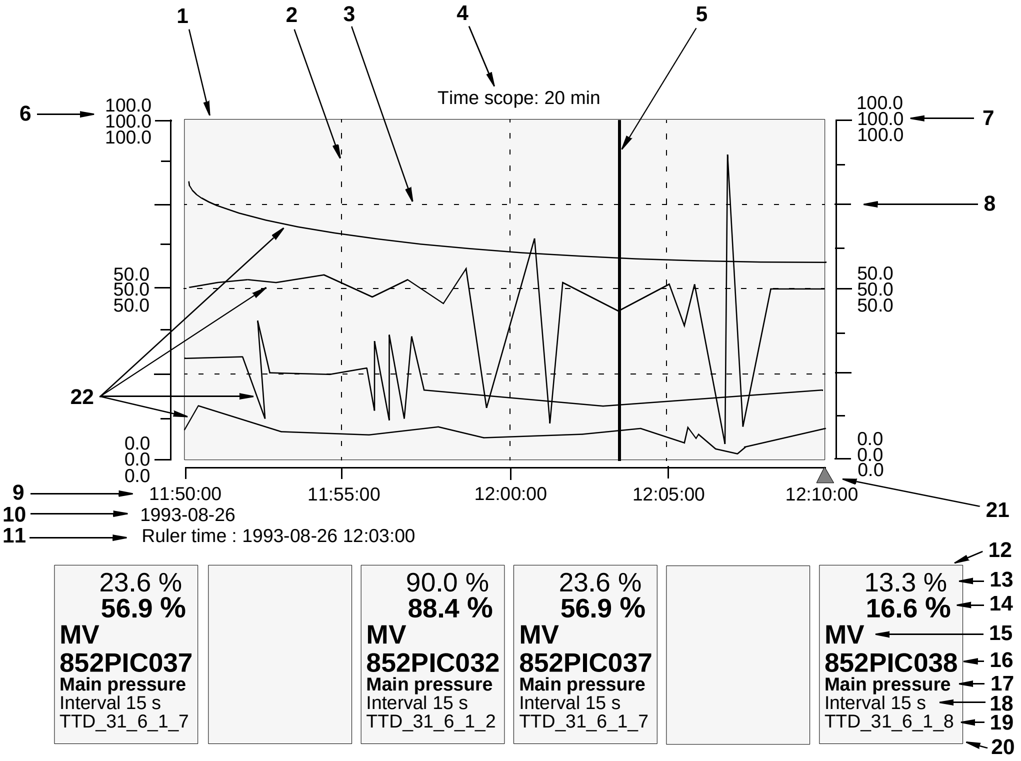
Underlined parameters are configurable.

Configuration:

Parameters	Affects	Options (bold is default)	Remarks
TimeScope		**900**, (>= 2 x Resolution)	*Size of the trend area in seconds*
Resolution		**15**, (> 0)	*Trace resolution (interval) in seconds*
TTDName1	4.1 Trace 1	**!TTD_Dummy** - No Trace, (TTD_Net_Node_Log_Index)	*Name of TTD object for Trace 1.* *(TTD_Net_Node_Log_Index)* *Net must end with 0 (zero)*
TTDName2	4.2 Trace 2	**!TTD_Dummy** - No Trace, (TTD_Net_Node_Log_Index)	*Name of TTD object for Trace 2.* *(TTD_Net_Node_Log_Index)* *Net must end with 0 (zero)*
TTDName3	4.3 Trace 3	**!TTD_Dummy** - No Trace, (TTD_Net_Node_Log_Index)	*Name of TTD object for Trace 3.* *(TTD_Net_Node_Log_Index)* *Net must end with 0 (zero)*
TTDName4	4.4 Trace 4	**!TTD_Dummy** - No Trace, (TTD_Net_Node_Log_Index)	*Name of TTD object for Trace 4.* *(TTD_Net_Node_Log_Index)* *Net must end with 0 (zero)*
Color1	4.1 Trace 1	**K5** (Green), any color	*Color of the 1. Trace*
Color2	4.2 Trace 2	**K9** (Cyan), any color	*Color of the 2. Trace*
Color3	4.3 Trace 3	**K11** (Magenta), any color	*Color of the 3. Trace*
Color4	4.4 Trace 4	**C1** (Dark Blue), any color	*Color of the 4. Trace*
ScopeStringVis	3. ScopeString	**true**, (false)	
ScopeColor	3. ScopeString	**M16** (Grey), any color	
ScopeFont	3. ScopeString	**FC20,** any font	
ScopeString	3. ScopeString	“ “, empty string	*User defined text*
BackGround	4. Presentation of Trace1 - Trace4	**K16** (Black), any color	*Background color of the trend area*
UpdateScope		**0**	*Size of the update area in seconds*
YGridVis	1. Y grid	**1**, (0)	*Visibility of the horizontal grid lines*
yMajorTicks		**5**	*Number of major ticks on y axis*
XGridVis	2. X grid	**1**, (0)	*Visibility of the vertical grid lines*
xMajorTicks		**2**	*Number of minor ticks on x axis*
GridColor	2. Y grid and 3. X grid	**M16** (Grey), any color	*Color of the grid*
TraceThickness	4. Presentation of Trace1 - Trace4	**1**, (1...4)	*Thickness of the Trace1 - Trace4*

4.19.5 TRTD01

Presentation:



Behavior:

No	Description	Presentation	Condition	Remarks
1	**SelectFrame**	White		*Indicates dialog is active* selectColor
		Black		
2	**X grid**	Grey	XGridVis = true	*Spacing follows time axis* GridColor
3	**Y grid**	Grey	YGridVis = true	*Spacing is configurable* GridColor
4	**TimeScope**			*TimeScope*
4.1		**Time scope:** Grey		*Text in front of value*
4.2		Grey	TimeScope	*TimeScope value*
5	**Ruler**	White	RulerColor	*Activated by press in trend area*
6	**Left Y axis**	Grey		
6.1	**Y axis scale Trace 1**	Green	TTDName1 = TTD_Net_Node_Log_Index	Color1
6.2	**Y axis scale Trace 2**	Cyan	TTDName2 = !TTD_Dummy2	Color2
6.3	**Y axis scale Trace 3**	Magenta	TTDName3 = TTD_Net_Node_Log_Index	Color3

No	Description	Presentation	Condition	Remarks
7	**Right Y axis**	Grey		
7.1	**Y axis scale Trace 4**	Dark Blue	TTDName4 = TTD_Net_Node_Log_Index	Color4
7.2	**Y axis scale Trace 5**	Orange	TTDName5 = !TTD_Dummy5	Color5
7.3	**Y axis scale Trace 6**	Yellow	TTDName6 = TTD_Net_Node_Log_Index	Color6
8	**Y axis major ticks**	Grey		yMajorTicks
9	**Time axis**	Grey	hour:minute:second	*Tick spacing is calculated to give number of ticks <= 10* XColor
10	**Date**	Grey	year-month-day	XColor
11	**Ruler time**	-	Ruler is invisible	*Ruler is inactive*
				Ruler is active
		Ruler time : White		*Text in front of Date and Time*
		White	year-month-day hour:minute:second	*Date and Time* RulerColor
12	**SelectFrame Trace 6**	White	The trace is active	*Frame round active trace*
		-	Trace inactive	*Invisible*
13	**Ruler read out value Trace 6**		TTDName6 = TTD_Net_Node_Log_Index	*Value at ruler time*
		-	Ruler is invisible	*Ruler is inactive*
				Ruler is active
		**************** White	Log entry status = BAD_DATA or Log entry status = NO_DATA	*Bad Ruler value or* *No Ruler value*
		White	VALUE	*Ruler value* RulerColor
		White	UNIT	*EngineeringUnit* RulerColor
14	**Read out value Trace 6**		TTDName6 = TTD_Net_Node_Log_Index	*Value at most recent time in scope.*
		-	Log entry status = BAD_DATA or Log entry status = NO_DATA	*Value invisible*
		Yellow	VALUE	*Current Value* Color6
		Yellow	UNIT	*EngineeringUnit* Color6
15	**Attribute Trace 6**	Yellow	TTDName6 = TTD_Net_Node_Log_Index	*The log source object attribute* Color6
16	**Object Name Trace 6**	Yellow	TTDName6 = TTD_Net_Node_Log_Index	*Name of log source object* Color6
17	**Object Description Trace 6**	Yellow	TTDName6 = TTD_Net_Node_Log_Index	*Description of log source object* Color6
18	**Storage Interval Trace 6**	Grey	TTDName6 = TTD_Net_Node_Log_Index	

No	Description	Presentation	Condition	Remarks
19	**LogName Trace 6**	Grey	TTDName6 = TTD_Net_Node_Log_Index	*Name of log object.*
20	**SelectArea Trace 6**	Black		*This area is select sensitive and will start dialog at TRACE level.* BackGround
21	**Present Time Indication**	Filled triangle, Grey		*Visible when the right most time in the scope is present time.*
22	**Presentation of Trace 1 - Trace 6**			*Polygon, growing from left to right. Line thickness is configurable. Color = Black in areas with data status = BAD_DATA or NO_DATA.* BackGround
22.1	**Trace 1**	Green	TTDName1 = TTD_Net_Node_Log_Index	Color1
22.2	**Trace 2**	Cyan	TTDName2 = !TTD_Dummy2	*Invisible* Color2
22.3	**Trace 3**	Magenta	TTDName3 = TTD_Net_Node_Log_Index	Color3
22.4	**Trace 4**	Dark Blue	TTDName4 = TTD_Net_Node_Log_Index	Color4
22.5	**Trace 5**	Orange	TTDName5 = !TTD_Dummy5	*Invisible* Color5
22.6	**Trace 6**	Yellow	TTDName6 = TTD_Net_Node_Log_Index	Color6

The conditions are in priority order. Underlined parameters are configurable.

Configuration:

Parameters	Affects	Options (bold is default)	Remarks
TimeScope	4. TimeScope and 10. Time axis	**3600**	*Single trend only - Size of the trend area in seconds*
Resolution	9. Time axis	**15**	*Single trend only - Trace resolution (interval) in seconds*
TTDName1 TTDName2 TTDName3 TTDName4 TTDName5 TTDName6	12 - 20.	**!TTD_Dummy1** - No Trace, TTD_Net_Node_Log_Index	*Single trend only - Name of TTD object for* *Trace 1.* *Trace 2.* *Trace 3.* *Trace 4.* *Trace 5.* *Trace 6.* *Net must end with 0 (zero)*
RuntimeChangeable		**true,** false	*Multi trend only - Configurable in runtime. If false then the display can only be configured in the display builder.*

Parameters	Affects	Options (bold is default)	Remarks
MindialogChangeable		**true,** false	*Multi trend only - Changeable with min dialog. Define if key is needed to change display*
 ObjectName1 ObjectName2 ObjectName3 ObjectName4 ObjectName5 ObjectName6	 16, 22		*Multi trend only - Name of the first object in the display second object in the display third object in the display fourth object in the display fifth object in the display sixth object in the display*
 AttributeName1 AttributeName2 AttributeName3 AttributeName4 AttributeName5 AttributeName6	 15		*Multi trend only - Attribute name of the first object in the display the second object in the display the third object in the display the fourth object in the display the fifth object in the display the sixth object in the display*
Scope DynKey6	4. Time Scope and 10. Time axis	**3600**	*Multi trend only (value in seconds)*
Scope DynKey7	4. Time Scope and 10. Time axis	**14400**	*Multi trend only (value in seconds)*
Scope DynKey8	4. Time Scope and 10. Time axis	**28800**	*Multi trend only (value in seconds)*
Scope DynKey9	4. Time Scope and 10. Time axis	**86400**	*Multi trend only (value in seconds)*
Scope DynKey10	4. Time Scope and 10. Time axis	**172800**	*Multi trend only (value in seconds)*
ObjectNameFont	15. Attribute name and 16. Object name	**FA40**	*Used for object name and attribute name*
XAxisFont	9. Time axis and 10. Date	**FA40**	*Used for time and date axis*
YAxisFont	6. Y-axis 13. 14. Ruler read out value 17. Object description	**FC20**	*Used for Y-axis, description, eng.unit, etc.*
RulerColor	5., 11 -13. Ruler Time and Value	**L16** (Grey), any color	*Color of the ruler Time and Date*
YGridVis	3. Y grid	**1**, (0)	*Visibility of the horizontal grid lines*
yMajorTicks	8. Y axis major ticks	**5**	*Number of major ticks on y axis*
XGridVis	2. X grid	**1**, (0)	*Visibility of the vertical grid lines*
GridColor	2. Y grid and 3. X grid	**M16** (Grey), any color	*Color of the grid*
LineThickness1	22.1 Trace 1	**2.0**	*Thickness of the 1. Trace*
LineThickness2	22.2 Trace 2	**2.0**	*Thickness of the 2. Trace*
LineThickness3	22.3 Trace 3	**2.0**	*Thickness of the 3. Trace*

Parameters	Affects	Options (bold is default)	Remarks
LineThickness4	22.4 Trace 4	**2.0**	*Thickness of the 4. Trace*
LineThickness5	22.5 Trace 5	**2.0**	*Thickness of the 5. Trace*
LineThickness6	22.6 Trace 6	**2.0**	*Thickness of the 6. Trace*
Color1	6.1, 14 - 17, 22.1	**K5** (Green), any color	*Color of the 1. Trace*
Color2	6.2, 14 - 17, 22.2	**K9** (Cyan), any color	*Color of the 2. Trace*
Color3	6.3, 14 - 17, 22.3	**K11** (Magenta), any color	*Color of the 3. Trace*
Color4	7.1, 14 - 17, 22.4	**K8** (Blue), any color	*Color of the 4. Trace*
Color5	7.2, 14 - 17, 22.5	**K13** (Cream), any color	*Color of the 5. Trace*
Color6	7.3, 14 - 17, 22.6	**K3** (Yellow), any color	*Color of the 6. Trace*
noOfDecimals1	6.1 Y axis scale Trace 1	**3,** (0..4)	*Number of decimals in read out values of the 1. Trace*
noOfDecimals2	6.2 Y axis scale Trace 2	**3,** (0..4)	*Number of decimals in read out values of the 2. Trace*
noOfDecimals3	6.3 Y axis scale Trace 3	**3,** (0..4)	*Number of decimals in read out values of the 3. Trace*
noOfDecimals4	7.1 Y axis scale Trace 4	**3,** (0..4)	*Number of decimals in read out values of the 4. Trace*
noOfDecimals5	7.2 Y axis scale Trace 5	**3,** (0..4)	*Number of decimals in read out values of the 5. Trace*
noOfDecimals6	7.3 Y axis scale Trace 6	**3,** (0..4)	*Number of decimals in read out values of the 6. Trace*
XColor	9. Time axis and 10. Date	**M16** (Grey), any color	*Color of the Time axis*
selectColor	1. SelectFrame	**L16** (White), any color	*Color indicating presentation is selected*
BackGround	20. SelectArea	**K16** (Black), any color	*Background color of the trend area*
Alignment		**60**	*Alignment of the X axis labels in seconds*

4.20 Process Dialog for Text Handling TEXT

4.20.1 MIN Dialog (No authority key)

4.20.1.1 Keyboard keys

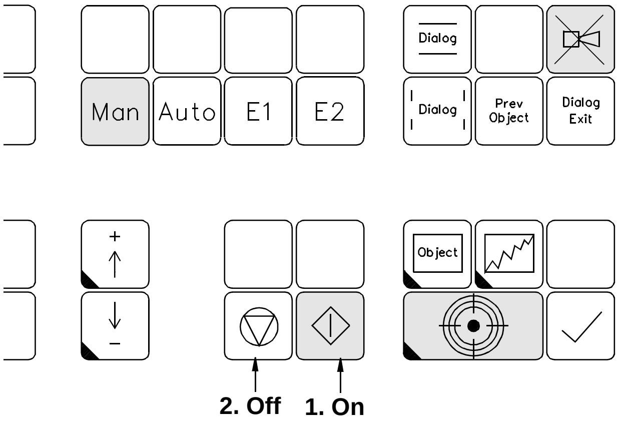


Figure 4-123. Keyboard keys

Key 1: On	Perform: Set Boolean to one if MAN = 1 and ORD_BLK = 0	BOOLEAN = 1
Key 2: Off	Perform: Set Boolean to zero if MAN = 1 and ORD_BLK = 0	BOOLEAN = 0

4.20.1.2 Dynamic keys, Top Level

D1 On	D2	D3	D4	D5
D6 Off	D7 Integer	D8 Real	D9 Text	D10

Figure 4-124. Dynamic keys

D1: On	Perform: Set Boolean to one if MAN = 1 and ORD_BLK = 0 if AUTO = 1 then key is dimmed Pressed: green text Released: white text	BOOLEAN = 1
D6: Off	Perform: Set Boolean to zero if MAN = 1 and ORD_BLK = 0 if AUTO = 1 then key is dimmed Pressed: green text Released: white text	BOOLEAN = 0
D7: Integer	Perform: Change integer value if MAN = 1 and ORD_BLK = 0 if AUTO = 1 then key is dimmed	INT_LONG
D8: Real	Perform: Change real value if MAN = 1 and ORD_BLK = 0 if AUTO = 1 then key is dimmed	REAL
D9: Text	Perform: Change text string if MAN = 1 and ORD_BLK = 0 if AUTO = 1 then key is dimmed	TEXT

4.20.2 MAX Dialog (Authority key)

4.20.2.1 Keyboard keys

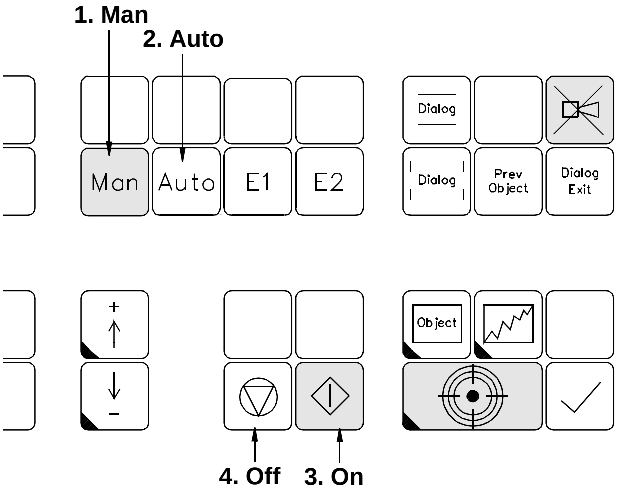


Figure 4-125. Keyboard keys

Key 1: Man	Perform: Set to manual mode	MAN = 1
Key 2: Auto	Perform: Set to automatic mode	MAN = 0
Key 3: On	Perform: Set value to one if MAN = 1 and ORD_BLK = 0	BOOLEAN = 1
Key 4: Off	Perform: Set value to zero if MAN = 1 and ORD_BLK = 0	BOOLEAN = 0

4.20.2.2 Dynamic keys, Top Level

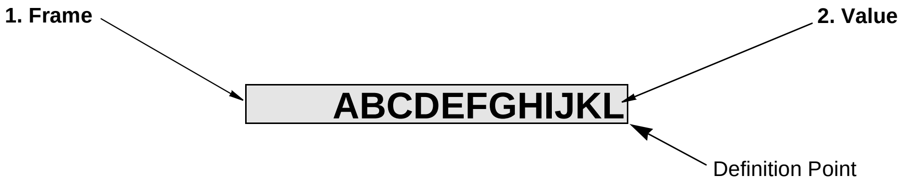
D1 On	D2 Man	D3 Auto	D4	D5
D6 Off	D7 Integer	D8 Real	D9 Text	D10

Figure 4-126. Dynamic keys

D1: On	Perform: Set Boolean to one if MAN = 1 and ORD_BLK = 0 if AUTO = 1 then key is dimmed Pressed: green text Released: white text	BOOLEAN = 1
D2: Man	Perform: Set to manual mode Pressed: green text Released: white text	MAN = 1
D3: Auto	Perform: Set to automatic mode Pressed: green text Released: white text	MAN = 0
D6: Off	Perform: Set Boolean to zero if MAN = 1 and ORD_BLK = 0 if AUTO = 1 then key is dimmed Pressed: green text Released: white text	BOOLEAN = 0
D7: Integer	Perform: Change integer value if MAN = 1 and ORD_BLK = 0 if AUTO = 1 then key is dimmed	INT_LONG
D8: Real	Perform: Change real value if MAN = 1 and ORD_BLK = 0 if AUTO = 1 then key is dimmed	REAL
D9: Text	Perform: Change text string if MAN = 1 and ORD_BLK = 0 if AUTO = 1 then key is dimmed	TEXT

4.20.3 TXTPD01

Presentation:



Behavior:

No	Description	Presentation	Condition	Remarks
1	**SelectFrame**	White	SELECTED = 1	*Selected*
		Black	-	FrameColor
2	**Value**		TEXT	*The object value*
		-	BLANKT = 1	*Invisible*
		Red flashing	COLOR2 = 1	Color2
		Red	COLOR1 = 1	Color1
		Green	-	NormalColor

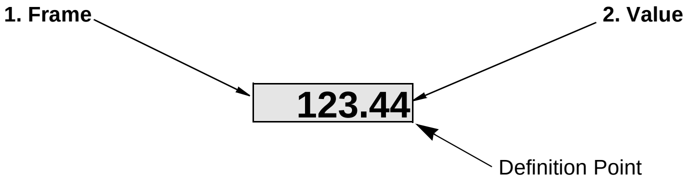
The conditions are in priority order. Underlined parameters are configurable.

Configuration:

Parameters	Affects	Options (bold is default)	Remarks
NormalColor	2. Value	**K5** (Green), any color	
SelectAreaColor	1. SelectFrame	**K16** (Black), any color	*Background color and deletion color*
Alignment	2. Value	**1**=Left, 2=Center or 3=Right	*Alignment of text in field*
NumberOfChar	2. Value	**72**, (1..72)	*Number of total character that the field could contain.*
Font	2. Value	**FA40**, any font	
Color1	2. Value	**K1** (Red), any color	
Color2	2. Value	**N1** (Red Flashing), any color	
FrameColor	1. SelectFrame	**K16** (Black), any color	*mostly = SelectareaColor*
FrameWidth	1. SelectFrame	**2**, (1..4)	

4.20.4 TXTPD02

Presentation:



Behavior:

No	Description	Presentation	Condition	Remarks
1	**SelectFrame**	White	SELECTED = 1	*Selected*
		Black	-	FrameColor
2	**Values**			*The object values*
			REAL	DataToShow = REAL
			INT_LONG	DataToShow= IL
			BOOLEAN	DataToShow = TB
		No Datatype Green	-	
		-	BLANKx = 1	*Invisible, x = IL,R, or T**
		Red flashing	COLOR2 = 1	Color2
		Red	COLOR1 = 1	Color1
		Green	-	NormalColor

The conditions are in priority order. Underlined parameters are configurable.

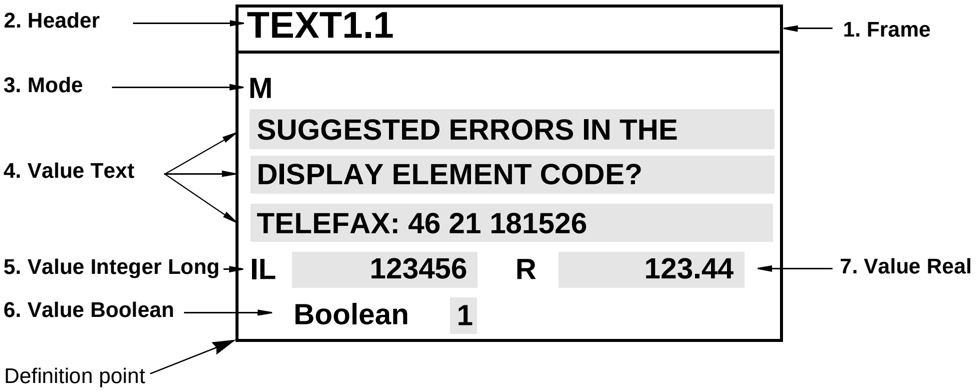
* invisible is only possible for INT_LONG, REAL and BOOLEAN.

Configuration:

Parameters	Affects	Options (bold is default)	Remarks
DataToShow	2. Value	**REAL**, IL or TB	
NormalColor	2. Value	**K5** (Green), any color	
SelectAreaColor	1. SelectFrame	**K16** (Black), any color	*Background color and deletion color*
Font	2. Value	**FA40**, any font	
Color1	2. Value	**K1** (Red), any color	
Color2	2. Value	**N1** (Red Flashing), any color	
FrameColor	1. SelectFrame	**K16** (Black), any color	*mostly = SelectareaColor*
FrameWidth	1. SelectFrame	**2**, (1..4)	
NumberOfChar	2. Value	**7**	*Including . and -*

4.20.5 TXTWI01

Presentation:



Behavior:

No	Description	Presentation	Condition	Remarks
1	**Select Frame**			*Object select frame*
		White	SELECTED = 1	*Only for overlap*
		Black	-	
2	**Header**	Green	NAME	*The object name*
3	**Mode**			*The object mode*
		M Green	MAN = 1	*Manual mode*
		A Green		*Auto mode*
4	**Value Text**		TEXT	*The object Text value*
		-	BLANKT = 1	*Invisible*
		Red flashing	COLOR2 = 1	
		Red	COLOR1 = 1	
		Green	-	
5	**Value Integer Long**		INT_LONG	*The object IL value*
		-	BLANKIL = 1	*Invisible*
		Red flashing	COLOR2 = 1	
		Red	COLOR1 = 1	
		Green	-	

No	Description	Presentation	Condition	Remarks
6	**Value Boolean**		BOOLEAN	*The object Boolean value*
		-	BLANKB = 1	*Invisible*
		1	BOOLEAN =1	
		0	-	
		Red flashing	COLOR2 = 1	
		Red	COLOR1 = 1	
		Green	-	
7	**Value real**		REAL	*The object Real value*
		-	BLANKR = 1	*Invisible*
		Red flashing	COLOR2 = 1	
		Red	COLOR1 = 1	
		Green	-	

4.21 Process Dialog for Valve Control VALVECON

4.21.1 MIN Dialog (No authority key)

4.21.1.1 Keyboard keys

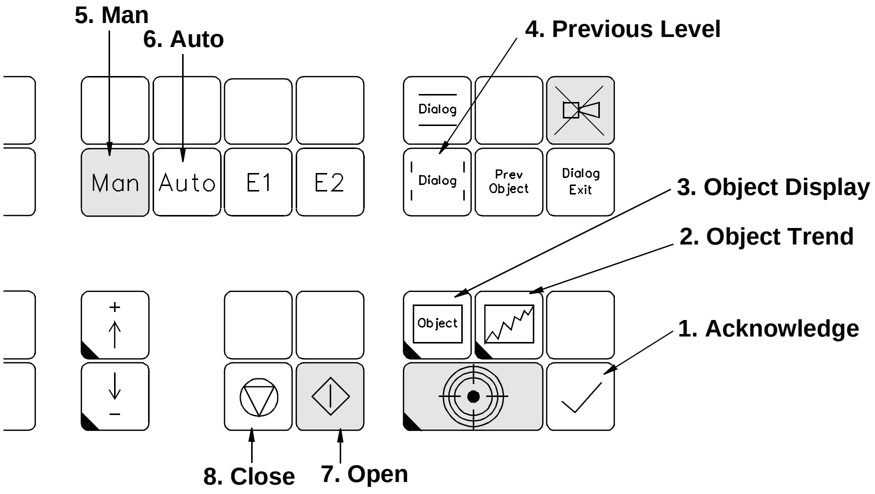


Figure 4-127. Keyboard keys

Key 1: Acknowledge	Perform: Acknowledge	AL_UNACK = 0
Key 2: Object Trend	Select: Object Trend	
Key 3: Object Display	Select: Object Display	
Key 4: Previous Level	Select Dynamic keys: Top Level	
Key 5: Man	Perform: Set to manual mode	MORD_05 = 1
Key 6: Auto	Perform: Set to automatic mode	MORD_04 = 1
Key 7: Open	Perform: Open valve	MORD_08 = 1
Key 8: Close	Perform: Close valve	MORD_09 = 1

4.21.1.2 Dynamic keys, Top Level

D1 Sequence	D2 Central	D3 Local	D4	D5
D6	D7	D8	D9	D10 Keyboard...

Figure 4-128. Dynamic keys

D1: Sequence	Perform: Set control to Sequence Pressed: green text Released: white text	MORD_10 = 1
D2: Central	Perform: Set control to Central Pressed: green text Released: white text	MORD_03 = 1
D3: Local	Perform: Set control to Local Pressed: green text Released: white text	MORD_00 = 1
D10:Keyboard...	Select Dynamic keys: Keyboard	

4.21.1.3 Dynamic keys, Keyboard

D1 ■ Open	D2 Man	D3 Auto	D4	D5
D6 □ Close	D7 Acknowledge	D8 Object Display	D9 Trend Object	D10

Figure 4-129. Dynamic keys

D1: Open	Perform: Open valve	MORD_08 = 1
D2: Man	Perform: Set to manual mode	MORD_05 = 1
D3: Auto	Perform: Set to automatic mode	MORD_04 = 1
D6: Close	Perform: Close valve	MORD_09 = 1
D7: Acknowledge	Perform: Acknowledge	AL_UNACK = 0
D8: Object Display	Select: Object Display	
D9: Object Trend	Select: Object Trend	

4.21.2 MAX Dialog (Authority key)

4.21.2.1 Keyboard keys

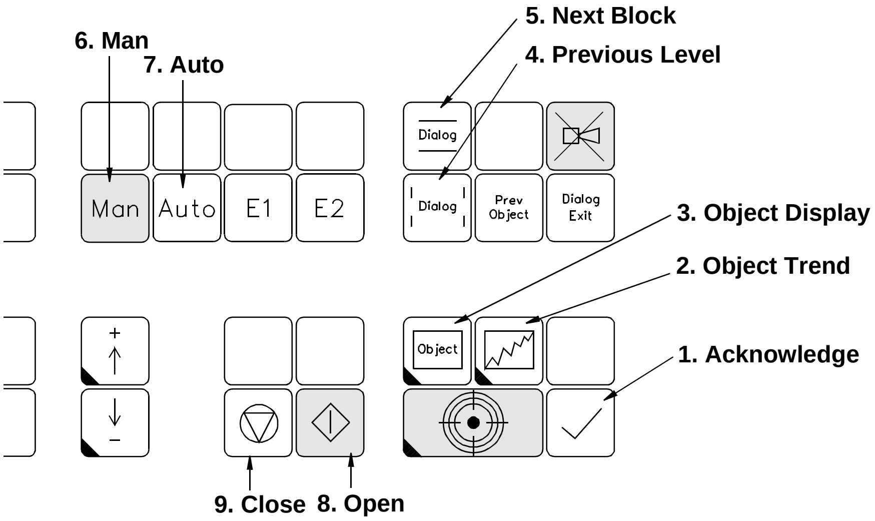


Figure 4-130. Keyboard keys

Key 1: Acknowledge	Perform: Acknowledge	AL_UNACK = 0
Key 2: Object Trend	Select: Object Trend	
Key 3: Object Display	Select: Object Display	
Key 4: Previous Level	Select Dynamic keys: Top Level	
Key 5: Next Block	Page between the dynamic key sets: Block and Keyboard	
Key 6: Man	Perform: Set to manual mode	MORD_05 = 1
Key 7: Auto	Perform: Set to automatic mode	MORD_04 = 1
Key 8: Open	Perform: Open valve	MORD_08 = 1
Key 9: Close	Perform: Close valve	MORD_09 = 1

4.21.2.2 Dynamic keys, Top Level

D1 Sequence	D2 Central	D3 Local	D4 Test	D5 Out of Service
D6	D7	D8 Block...	D9	D10 Keyboard...

Figure 4-131. Dynamic keys

D1: Sequence	Perform: Set control to Sequence Pressed: green text Released: white text	MORD_10 = 1
D2: Central	Perform: Set control to Central Pressed: green text Released: white text	MORD_03 = 1
D3: Local	Perform: Set control to Local Pressed: green text Released: white text	MORD_00 = 1
D4: Test	Perform: Set control to Test Pressed: green text Released: white text	MORD_01= 1
D5: Out of Service	Perform: Set control to Out of Service Pressed: green text Released: white text	MORD_02 = 1
D8: Block...	Select Dynamic keys: Block	
D10:Keyboard...	Select Dynamic keys: Keyboard	

4.21.2.3 Dynamic keys, Keyboard

D1 ■ Open	D2 Man	D3 Auto	D4	D5
D6 □ Close	D7 Acknowledge	D8 Object Display	D9 Trend Object	D10

Figure 4-132. Dynamic keys

D1: Open	Perform: Open valve	MORD_08 = 1
D2: Man	Perform: Set to manual mode	MORD_05 = 1
D3: Auto	Perform: Set to automatic mode	MORD_04 = 1
D6: Close	Perform: Close valve	MORD_09 = 1
D7: Acknowledge	Perform: Acknowledge	AL_UNACK = 0
D8: Object Display	Select: Object Display	
D9: Object Trend	Select: Object Trend	

4.21.2.4 Dynamic keys, Block

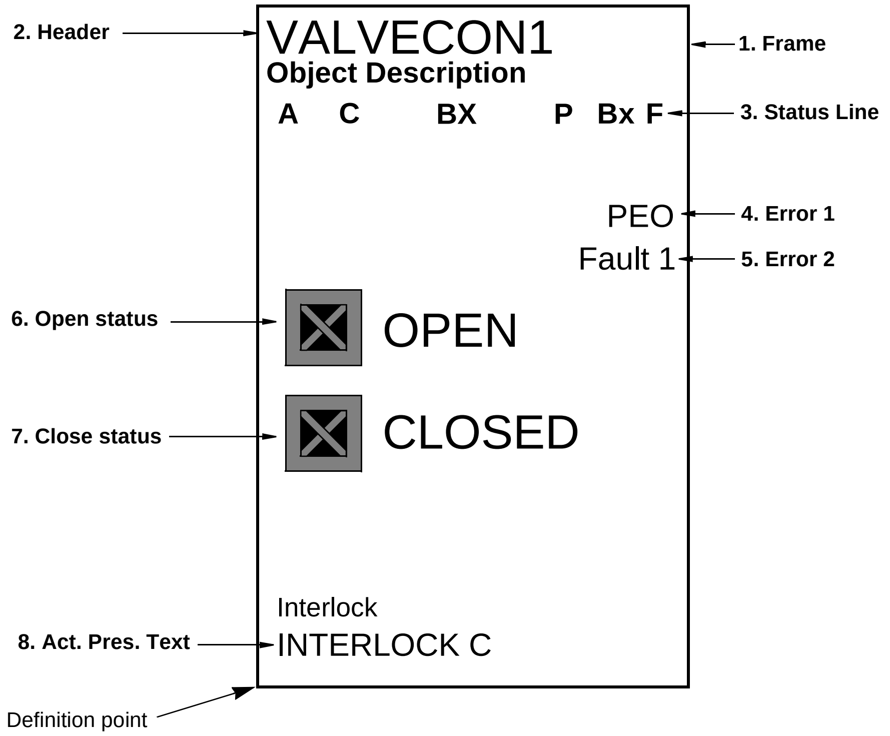
D1	D2 Block Alarm	D3 Block Printout	D4	D5 Override Interlock
D6	D7 Deblock Alarm	D8 Deblock Printout	D9	D10 Normal Interlock

Figure 4-133. Dynamic keys

D2: Block Alarm	Pressed: yellow text Released: white text	AL_BLK = 1
D3: Block Printout	Pressed: yellow text Released: white text	PR_BLK = 1
D5: Override Interlock	Pressed: yellow text Released: white text	MORD_06 = 1
D7: Deblock Alarm	Pressed: green text Released: white text	AL_BLK = 0
D8: Deblock Printout	Pressed: green text Released: white text	PR_BLK = 0
D10: Normal Interlock	Pressed: green text Released: white text	MORD_07 = 1

4.21.3 VALGR01

Presentation:



Behavior:

No	Description	Presentation	Condition	Remarks
1	**SelectFrame**	White	SELECTED = 1	*Object select frame*
		Black	-	
2	**Header**		NAME and DESCR	*Object name and description*
		Red flashing	AU_IND = 1	*Unacknowledged alarm*
		Red	IND1_DIST = 1	*Alarm*
		Green	-	*Normal*
3	**Status Line**			*Status Line*
3.1	**Mode**	**M** Green	IND2_05 = 0 and IND2_02 = 0 and IND2_03 = 0	*Manual mode* ManModeColor
		A Green	IND2_05 = 1 and IND2_02 = 0 and IND2_03 = 0	*Auto mode*

No	Description	Presentation	Condition	Remarks
3.2	**Point Of Control**	**O** Yellow	IND2_03 = 1	*Out of Service*
		T Yellow	IND2_02 = 1	*Test*
		L Green	IND2_01 = 1	*Local*
		S Green	IND2_04 = 1	*Sequence*
		C Green	IND2_01 = 0 and IND2_02 = 0 and IND2_03 = 0 and IND2_04 = 0	*Central*
3.3	**Interlock Indication**	**X** Green	IND2_08 = 1 or IND2_09 = 1 or IND2_11 = 1 or (IND2_13 = 1 and IND1_12 = 0) or (IND2_00 = 0 and (IND2_10 = 1 or (IND2_12 = 1 and IND1_12 = 0)))	*Safety interlock or* *Operator interlock*
		BX Red	IND2_15 = 1	*Override Interlocks. Interlock IB1 or IB3 active*
		BX Yellow	IND2_00 = 1	*Override Interlock*
3.4	**Printout Blocked**	**P** Yellow	PR_BLK = 1	*Printout blocked*
3.5	**Alarm Blocked**	**B** Yellow	AL_BLK = 1	*Alarm blocked by operator*
		Bx Yellow	AL_P_BLK = 1	*Alarm blocked by PC-program*
3.6	**Fault Indication**	**F** Red	IND1_08 = 1	*Collective fault indication*
4	**Error 1**	**PEO** Red flashing	AU_IND1_02 = 1	*Unack Position Error Open*
		PEC Red flashing	AU_IND1_03 = 1	*Unack Position Error Close*
		PEO Red	IND1_02 = 1	*Position Error Open*
		PEC Red	IND1_03 = 1	*Position Error Close*
5	**Error 2**	**Fault 1** Red flashing	AU_IND1_00 = 1	*Unacknowledged Fault 1*
		Fault 2 Red flashing	AU_IND1_01 = 1	*Unacknowledged Fault 2*
		Fault 1 Red	IND1_00 = 1	*Fault 1*
		Fault 2 Red	IND1_01 = 1	*Fault 2*

No	Description	Presentation	Condition	Remarks
6.1	**Valve Open Status**	⊠ Green	IND2_07 = 0	*Not ready for start*
		□ Green flashing	IND1_12 = 1 and IND1_15 = 1	*Open* *No limit position open*
		□ Green	IND1_07 = 1	*Limit position open*
		■ Green	IND1_07 = 0 and IND1_15 = 0	*No limit position open*
		⧄ Green	IND2_07 = 1 and IND2_14 = 1	*A-Interlock*
		Grey	IND2_03 = 1	*Out of service*
6.2	**Valve Open Text**	Green	PRES_A	*User defined text*
7.1	**Valve Close Status**	⊠ Green	IND2_07 = 0	*Not ready for start*
		□ Green flashing	IND1_13 = 1 and IND1_15 = 1	*Close* *No limit position close*
		□ Green	IND1_11 = 1	*Limit position close*
		■ Green	IND1_11 = 0 and IND1_15 = 0	*No limit position close*
		⧄ Green	IND2_07 = 1 and IND2_14 = 1	*A-Interlock*
		Grey	IND2_03 = 1	*Out of service*
7.2	**Valve Close Text**	Green	PRES_B	*User defined text*
8.1	**Interlock Text**	**Interlock** Grey		*Interlock text*
8.2	**Act Pres Text**		ACT_PRES_TEXT	*Actual interlock text*
		Red	IND2_07 = 0	*Not ready for start*
		Yellow	IND2_07 = 1	*Ready for start*

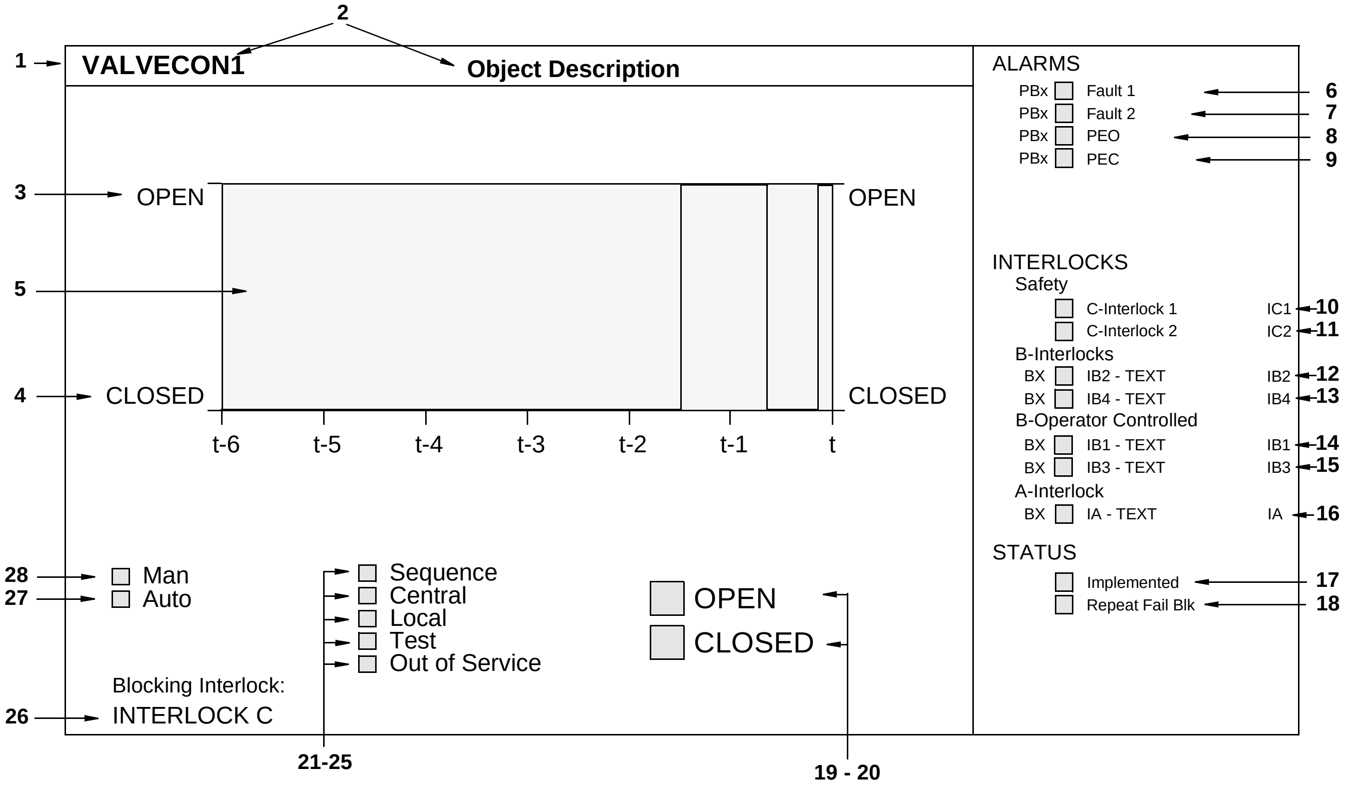
The conditions are in priority order. Underlined parameters are configurable.

Configuration:

Parameters	Affects	Options (bold is default)	Remarks
NameFont	2. Header Name	**FC50**, any font	
ManModeColor	3.1 Mode	**K5** (Green), any color	

4.21.4 VALOB01

Presentation:



Behavior:

No	Description	Presentation	Condition	Remarks
1	**SelectFrame**	White	SELECTED = 1	*Object select frame*
		Black	-	
2	**Header**		NAME and DESCR	*Object name and description*
		Red flashing	AU_IND = 1	*Unacknowledged alarm*
		Red	IND1_DIST = 1	*Alarm*
		Green	-	*Normal*
3	**Range Max**	Green		*User defined text for open position*
4	**Range Min**	Green		*User defined text for close position*
5	**Trim Curve**	Green		*Curve shows the valve position*

No	Description	Presentation	Condition	Remarks
6	**ALARMS**			*Alarms*
6.1	**Printout Blocked**	**P** Yellow	PR_BLK = 1	*Printout blocked*
6.2	**Alarm Blocked**	**B** Yellow	AL_BLK = 1	*Alarm blocked by operator*
		Bx Yellow	AL_P_BLK = 1	*Alarm blocked by PC-program*
6.3	**Warning Indication**	■ Red flashing	AU_IND1_00 = 1	*Unacknowledged alarm*
		■ Red	IND1_00 = 1	*Alarm*
6.4	**Alarm 1 Text**	**Fault 1**	TXT_BLK_00 = 0	*User defined Fault 1*
		Red	IND1_00 = 1 or AU_IND1_00 = 1	
		Grey	-	
7.1	**Printout Blocked**	**P** Yellow	PR_BLK = 1	*Printout blocked*
7.2	**Alarm Blocked**	**B** Yellow	AL_BLK = 1	*Alarm blocked by operator*
		Bx Yellow	AL_P_BLK = 1	*Alarm blocked by PC-program*
7.3	**Warning Indication**	■ Red flashing	AU_IND1_01 = 1	*Unacknowledged alarm*
		■ Red	IND1_01 = 1	*Alarm*
7.4	**Alarm 2 Text**	**Fault 2**	TXT_BLK_01 = 0	*User defined Fault 2*
		Red	IND1_01 = 1 or AU_IND1_01 = 1	
		Grey	-	
8.1	**Printout Blocked**	**P** Yellow	PR_BLK = 1	*Printout blocked*
8.2	**Alarm Blocked**	**B** Yellow	AL_BLK = 1	*Alarm blocked by operator*
		Bx Yellow	AL_P_BLK = 1	*Alarm blocked by PC-program*
8.3	**Warning Indication**	■ Red flashing	AU_IND1_02 = 1	*Unacknowledged alarm*
		■ Red	IND1_02 = 1	*Alarm*
8.4	**Alarm 3 Text**	**PEO**	TXT_BLK_02 = 0	*PEO Position Error Open*
		Red	IND1_02 = 1 or AU_IND1_02 = 1	
		Grey	-	
9.1	**Printout Blocked**	**P** Yellow	PR_BLK = 1	*Printout blocked*
9.2	**Alarm Blocked**	**B** Yellow	AL_BLK = 1	*Alarm blocked by operator*
		Bx Yellow	AL_P_BLK = 1	*Alarm blocked by PC-program*
9.3	**Warning Indication**	■ Red flashing	AU_IND1_03 = 1	*Unacknowledged alarm*
		■ Red	IND1_03 = 1	*Alarm*
9.4	**Alarm 4 Text**	**PEC**	TXT_BLK_03 = 0	*PEC Position Error closed*
		Red	IND1_03 = 1 or AU_IND1_03 = 1	
		Grey	-	

No	Description	Presentation	Condition	Remarks
10	**INTERLOCKS**			*Interlocks*
10.1	**IC1 Active**	■ Yellow	IND2_08 = 1	*Safety Interlock IC1 active*
10.2	**IC1 Text**	**C-Interlock 1** Grey		*Safety Interlock IC1*
11.1	**IC2 Active**	■ Yellow	IND2_09 = 1	*Safety Interlock IC2 active*
11.2	**IC2 Text**	**C-Interlock 2** Grey		*Safety Interlock IC2*
12.1	**IB2 Blocked**	**BX** Yellow	IND2_02 = 1	*Test mode. Interlock blocked*
12.2	**IB2 Active**	■ Yellow	IND2_11 = 1	*Interlock IB2 active*
12.3	**IB2 Text**	Green	IB2_TXT	*Interlock text IB2*
13.1	**IB4 Block Indication**	**BX** Yellow	IND2_02 = 1	*Test mode. Interlock blocked*
13.2	**IB4 Active**	■ Yellow	IND2_13 = 1	*Interlock IB4 active*
13.3	**IB4 Text**	Green	IB4_TXT	*Interlock IB4 text*
14.1	**IB1 Blocked**	**BX** Red	IND2_15 = 1 and (IND2_00 = 1 or IND2_02 = 1)	*Override Interlock and Interlock IB1 active*
		BX Yellow	IND2_00 = 1 or IND2_02 = 1	*Test mode. Interlock blocked*
14.2	**IB1 Active**	■ Yellow	IND2_10 = 1	*Interlock IB1 active*
14.3	**IB1 Text**	Green	IB1_TXT	*Interlock IB1 text*
15.1	**IB3 Blocked**	**BX** Red	IND2_15 = 1 and (IND2_00 = 1 or IND2_02 = 1)	*Override Interlock and Interlock IB3 active*
		BX Yellow	IND2_00 = 1 or IND2_02 = 1	*Test mode. Interlock blocked*
15.2	**IB3 Active**	■ Yellow	IND2_12 = 1	*Interlock IB3 active*
15.3	**IB3 Text**	Green	IB3_TXT	*Interlock IB3*
16.1	**IA Blocked**	**BX** Yellow	IND2_02 = 1	*Test mode. Interlock blocked*
16.2	**IA Active**	■ Yellow	IND2_14 = 1	*Interlock IA active*
16.3	**IA Text**	Green	IA_TXT	*Interlock IA text*
17	**STATUS**			*Status*
17.1	**Implemented Indication**	■ Green	ACT = 1	
17.2	**Implemented Text**	**Implemented** Grey		*Implemented*
18.1	**Repeat Fail Blocked Indication**	■ Yellow	REPEAT_BLK = 1	*The motor can be controlled*
18.2	**Repeat Fail Blocked Text**	**Repeat Fail Blk**		*Repeat Fail Blocked*
		Yellow	REPEAT_BLK = 1	
		Grey	-	

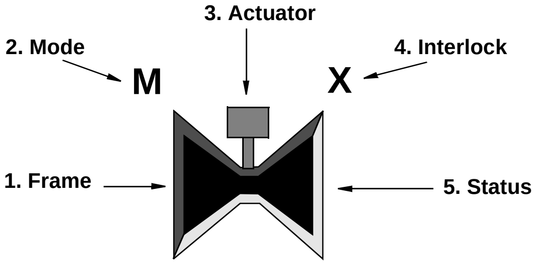
No	Description	Presentation	Condition	Remarks
19.1	**Valve Open Status**	☒ Green	IND2_07 = 0	*Not ready for start*
		□ Green flashing	IND1_12 = 1 and IND1_15 = 1	*Open* *No limit position open*
		□ Green	IND1_07 = 1	*Limit position open*
		■ Green	IND1_07 = 0 and IND1_15 = 0	*No limit position open*
		⧄ Green	IND2_07 = 1 and IND2_14 = 1	*A-Interlock*
		Grey	IND2_03 = 1	*Out of service*
19.2	**Valve Open Text**	Green	PRES_A	*User defined text*
20.1	**Valve Close Status**	☒ Green	IND2_07 = 0	*Not ready for start*
		□ Green flashing	IND1_13 = 1 and IND1_15 = 1	*Close* *No limit position close*
		□ Green	IND1_11 = 1	*Limit position close*
		■ Green	IND1_11 = 0 and IND1_15 = 0	*No limit position close*
		⧄ Green	IND2_07 = 1 and IND2_14 = 1	*A-Interlock*
		Grey	IND2_03 = 1	*Out of service*
20.2	**Valve Close Text**	Green	PRES_B	*User defined text*

No	Description	Presentation	Condition	Remarks
21.1	**Sequence Indication**	■ Green	IND2_04 = 1	*Sequence Controlled from groupstart*
21.2	**Sequence Text**	**Sequence**		
		Green	IND2_04 = 1	
		Grey	-	
22.1	**Central Indication**	■ Green	IND2_01 = 0 and IND2_02 = 0 and IND2_03 = 0 and IND2_04 = 0	*Central Controlled from operator's place*
22.2	**Central Text**	**Central**		
		Green	IND2_01 = 0 and IND2_02 = 0 and IND2_03 = 0 and IND2_04 = 0	
		Grey	-	
23.1	**Local Indication**	■ Green	IND2_01 = 1	*Local Controlled from local panel*
23.2	**Local Text**	**Local**		
		Green	IND2_01 = 1	
		Grey	-	
24.1	**Test Indication**	■ Yellow	IND2_02 = 1	*Test Jog running from motor place*
24.2	**Test Text**	**Test**		
		Yellow	IND2_02 = 1	
		Grey	-	
25.1	**Out of Service Indication**	■ Yellow	IND2_03 = 1	*Out of service No control possible*
25.2	**Out of Service Text**	**Out of Service**		
		Yellow	IND2_03 = 1	
		Grey	-	
26.1	**Blocking Interlock Text**	**Blocking Interlock:** Grey		*Blocking Interlock text*
26.2	**Actual Interlock Text**		ACT_PRES_TEXT	*Actual interlock text*
		Red	IND2_07 = 0	*Not ready for start*

No	Description	Presentation	Condition	Remarks
		Yellow	IND2_07 = 1	*Ready for start*
27.1	**Auto Indication**	■ Green	IND2_05 = 1 and IND2_02 = 0 and IND2_03 = 0	*Auto mode. Process conditions control start/stop of motor*
27.2	**Auto Text**	**Auto**		
		Green	IND2_05 = 1 and IND2_02 = 0 and IND2_03 = 0	
		Grey	-	
28.1	**Man Indication**	■ Green	IND2_05 = 0 and IND2_02 = 0 and IND2_03 = 0	*Manual mode. Startorder affects the motor directly*
28.2	**Man Text**	**Man** Grey		
		Green	IND2_05 = 0 and IND2_02 = 0 and IND2_03 = 0	
		Grey	-	

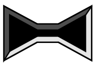
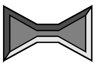
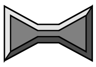
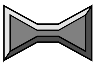
4.21.5 VALPD01

Presentation:



Behavior:

No	Description	Presentation	Condition	Remarks
1	**SelectFrame**	White	SELECTED = 1	*Selected*
		Yellow	IND2_00 = 1	*Interlock override by operator*
		Dotted Yellow	AL_BLK = 1	*Alarm blocked by operator*
		Black	-	
2	**Mode or**		ModeIndVisible = true	
	Control point	***** Yellow	IND2_02 = 1 and IND2_03 = 0	*Test*
		A Green	IND2_05 = 1 and IND2_02 = 0 and IND2_03 = 0	*Auto mode* AutoModeColor
		M Green	ManModeVisible = true and IND2_05 = 0 and IND2_02 = 0 and IND2_03 = 0	*Manual mode* ManModeColor
			ManModeVisible = false	
		S Green	IND2_04 = 1	*Sequence Control* SequenceColor
		L Green	IND2_01 = 1 and IND2_04 = 0	*Local Control* LocalColor
		C Green	IND2_01 = 0 and IND2_04 = 0	*Central Control* CentralColor
		-	ModeIndVisible = false	*Mode is invisible*
3	**Actuator Indication**		ActuatorIndVis = true	
		Grey	IND2_03 = 1	*Out Of Service*
		Red flashing	IND1_09 = 1	*Alarm Unack*
		Red	IND1_08 = 1	*Collective fault*
		Green	-	ActuatorColor
		-	ActuatorIndVis = false	*Actuator is invisible*

No	Description	Presentation	Condition	Remarks
4	**Interlock Indication**		InterlockIndVis = true	
		-	IND2_03 = 1	*Out Of Service - No indication*
		XA Yellow	IND2_14 = 1	*IA1*
		-	IND2_07 = 1	*Ready for start*
		X Yellow	IND2_08 = 1 or IND2_09 = 1 or IND2_11= 1 or (IND2_13 = 1 and IND1_11 = 0) or (IND2_00 = 0 and (IND2_10 = 1 or (IND2_12 = 1 and IND1_11 = 0)))	*IC1 or* *IC2 or* *IB2 or* *(IB4 & OPN=0) or* *(BlkIntl=0 &* *(IB1 or* *(IB3 & OPN=0)))*
		-	InterlockIndVis = false	*Interlock is invisible*
5	**Valve Status**	 Black	IND1_15 = 0 and IND1_11 = 1	ClosedColor *No intermediate position* *No limit position for open*
		 Green flashing	IND1_15 = 1 and IND1_12 = 0	IntermediateColor *Intermediate position* *Not open*
		 Green flashing	IND1_15 = 1 and IND1_12 = 1	IntermediateColor *Intermediate position* *Open*
		 Green	IND1_15 = 0 and IND1_07 = 1	OpenColor *No intermediate position* *Limit position for open*
		Grey	IND2_03 = 1	*Out Of Service*
		Red flashing	AU_IND = 1	*Unacknowledged alarm*
		Red	IND1_DIST = 1	*Alarm*
		Green	-	

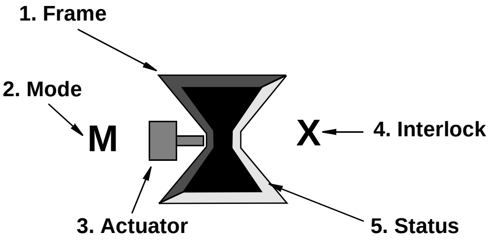
The conditions are in priority order. Underlined parameters are configurable.

Configuration:

Parameters	**Affects**	**Options (bold is default)**	**Remarks**
ModeIndVisible	2. Mode	**true, false**	*true= indication*
AutoModeColor	2. Mode	**K5** (Green), any color	
ManModeColor	2. Mode	**K5** (Green), any color	
ManModeVisible	2. Mode	**true, false**	*True = Man, False = S, L or C*
SequenceColor	2 Point Of Control	**K5** (Green), any color	
CentralColor	2 Point Of Control	**K5** (Green), any color	
LocalColor	2 Point Of Control	**K5** (Green), any color	
ActuatorIndVis	3. Actuator Indication	**false**, true	*false= No indication*
ActuatorColor	3. Actuator Indication	**K5** (Green), any color	
InterlockIndVis	4. Interlocks Indication	**false**, true	*false= No indication*
InterlockColor	4. Interlocks Indication	**K3** (Yellow), any color	
FrameWidth	1. SelectFrame	**2, (1..4)**	
ClosedColor	5. Valve Status	**K16** (Black), any color	
OpenColor	5. Valve Status	**K5** (Green), any color	
IntermediateColor	5. Valve Status	**N5** (Green Flashing), any color	
Light3DColor	5. Valve Status	**L5** (Light Green), any color	
Dark3DColor	5. Valve Status	**M5** (Dark Green), any color	
Font	2. Mode and 4. Interlocks Indication	**FA40**, any font	
UseDisplayColor	2. Mode	**false**, true	*true if DisplayColor used*
DisplayColor	2. Mode	**N13** (Black), any color	*Bg for Mode if UseDisplayColor is true*

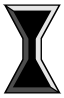
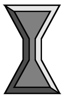
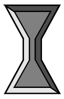
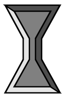
4.21.6 VALPD02

Presentation:



Behavior:

No	Description	Presentation	Condition	Remarks
1	**SelectFrame**	White	SELECTED = 1	*Selected*
		Yellow	IND2_00 = 1	*Interlock override by operator*
		Dotted Yellow	AL_BLK = 1	*Alarm blocked by operator*
		Black		
2	**Mode or**		ModeIndVisible = true	
	Control point	* Yellow	IND2_02 = 1 and IND2_03 = 0	*Test*
		A Green	IND2_05 = 1 and IND2_02 = 0 and IND2_03 = 0	*Auto mode* AutoModeColor
		M Green	ManModeVisible = true and IND2_05 = 0 and IND2_02 = 0 and IND2_03 = 0	*Manual mode* ManModeColor
			ManModeVisible = false	
		S Green	IND2_04 = 1	*Sequence Control* SequenceColor
		L Green	IND2_01 = 1 and IND2_04 = 0	*Local Control* LocalColor
		C Green	IND2_01 = 0 and IND2_04 = 0	*Central Control* CentralColor
		-	ModeIndVisible = false	*Mode is invisible*
3	**Actuator Indication**		ActuatorIndVis = true	
		Grey	IND2_03 = 1	*Out Of Service*
		Red flashing	IND1_09 = 1	*Alarm Unack*
		Red	IND1_08 = 1	*Collective fault*
		Green	-	ActuatorColor
		-	ActuatorIndVis = false	*Actuator is invisible*

No	Description	Presentation	Condition	Remarks
4	**Interlock Indication**		InterlockIndVis = true	
		-	IND2_03 = 1	*Out Of Service - No indication*
		XA Yellow	IND2_14 = 1	*IA1*
		-	IND2_07 = 1	*Ready for start*
		X Yellow	IND2_08 = 1 or IND2_09 = 1 or IND2_11= 1 or (IND2_13 = 1 and IND1_11 = 0) or (IND2_00 = 0 and (IND2_10 = 1 or (IND2_12 = 1 and IND1_11 = 0)))	*IC1 or* *IC2 or* *IB2 or* *(IB4 & OPN=0) or* *(BlkIntl=0 &* *(IB1 or* *(IB3 & OPN=0)))*
		-	InterlockIndVis = false	*Interlock is invisible*
5	**Valve Status**	 Black	= IND1_15 = 0 and IND1_11 = 1	ClosedColor *No intermediate position* *No limit position for open*
		 Green flashing	IND1_15 = 1 and IND1_12 = 0	IntermediateColor *Intermediate position* *Not open*
		 Green flashing	IND1_15 = 1 and IND1_12 = 1	IntermediateColor *Intermediate position* *Open*
		 Green	IND1_15 = 0 and IND1_07 = 1	OpenColor *No intermediate position* *Limit position for open*
		Grey	IND2_03 = 1	*Out Of Service*
		Red flashing	AU_IND = 1	*Unacknowledged Alarm*
		Red	IND1_DIST = 1	*Alarm*
		Green	-	

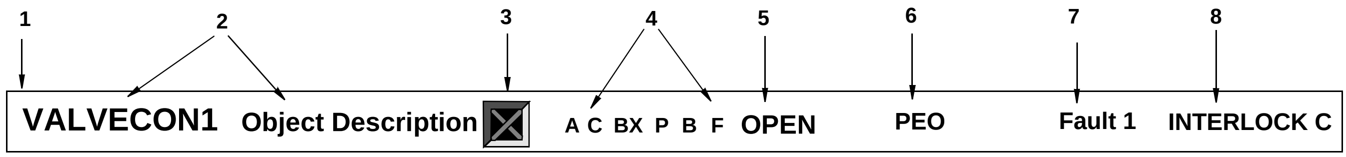
The conditions are in priority order. Underlined parameters are configurable.

Configuration:

Parameters	Affects	Options (bold is default)	Remarks
ModeIndVisible	2. Mode	**true, false**	*true= indication*
AutoModeColor	2. Mode	**K5** (Green), any color	
ManModeColor	2. Mode	**K5** (Green), any color	
ManModeVisible	2. Mode	**true, false**	*True = Man, False = S, L or C*
SequenceColor	2 Point Of Control	**K5** (Green), any color	
CentralColor	2 Point Of Control	**K5** (Green), any color	
LocalColor	2 Point Of Control	**K5** (Green), any color	
ActuatorIndVis	3. Actuator Indication	**false**, true	*false= No indication*
ActuatorColor	3. Actuator Indication	**K5** (Green), any color	
InterlockIndVis	4. Interlocks Indication	**false**, true	*false= No indication*
InterlockColor	4. Interlocks Indication	**K3** (Yellow), any color	
FrameWidth	1. SelectFrame	**2, (1..4)**	
ClosedColor	5. Valve Status	**K16** (Black), any color	
OpenColor	5. Valve Status	**K5** (Green), any color	
IntermediateColor	5. Valve Status	**N5** (Green Flashing), any color	
Light3DColor	5. Valve Status	**L5** (Light Green), any color	
Dark3DColor	5. Valve Status	**M5** (Dark Green), any color	
Font	2. Mode and 4. Interlocks Indication	**FA40**, any font	
UseDisplayColor	2. Mode	**false**, true	*true if DisplayColor used*
DisplayColor	2. Mode	**N13** (Black), any color	*Bg for Mode if UseDisplayColor is true*

4.21.7 VALSG01

Presentation:



Behavior:

No	Description	Presentation	Condition	Remarks
1	**SelectFrame**	White	SELECTED = 1	*Selected*
		Black	-	FrameColor
2	**Header**		NAME and DESCR	*Object name and description*
		Red flashing	AU_IND = 1	*Unacknowledged alarm*
		Red	IND1_DIST = 1	*Alarm*
		Green	-	*Normal*
3	**Valve Open Status**	☒ Green	IND2_07 = 0	*Not ready for start*
		☐ Green flashing	IND1_12 = 1 and IND1_15 = 1	*Open* *No limit position open*
		☐ Green	IND1_07 = 1	*Limit position for open*
		■ Green flashing	IND1_13 = 1 and IND1_15 = 1	*Close* *No limit for close*
		■ Green	IND1_11 = 0 and IND1_15 = 0	*Limit position for close*
		⧄ Green	IND2_07 = 1 and IND2_14 = 1	*A-Interlock*
		Grey	IND2_03 = 1	*Out of service*

No	Description	Presentation	Condition	Remarks
4	**Status Indication**			*Status Indication*
4.1	**Mode**	**M** *Green*	IND2_05 = 0 and IND2_02 = 0 and IND2_03 = 0	*Manual mode* ManModeColor
		A Green	IND2_05 = 1 and IND2_02 = 0 and IND2_03 = 0	*Auto mode* AutoModeColor
4.2	**Point Of Control**	**O** Yellow	IND2_03 = 1	*Out of Service*
		T Yellow	IND2_02 = 1	*Test*
		L Green	IND2_01 = 1	*Local* LocalColor
		S Green	IND2_04 = 1	*Sequence* SequenceColor
		C Green	IND2_01 = 0 and IND2_02 = 0 and IND2_03 = 0 and IND2_04 = 0	*Central* CentralColor
4.3	**Interlock Indication**	**X** Green	IND2_08 = 1 or IND2_09 = 1 or IND2_11 = 1 or (IND2_13 = 1 and IND1_12 = 0) or (IND2_00 = 0 and (IND2_10 = 1 or (IND2_12 = 1 and IND1_12 = 0)))	*Safety interlock or* *Operator interlock*
		BX Red	IND2_15 = 1	*Override Interlocks. Interlock IB1 or IB3 active*
		BX Yellow	IND2_00 = 1	*Override Interlock*
4.4	**Printout Blocked**	**P** Yellow	PR_BLK = 1	*Printout blocked*
4.5	**Alarm Blocked**	**B** Yellow	AL_BLK = 1	*Alarm blocked by operator*
		Bx Yellow	AL_P_BLK = 1	*Alarm blocked by PC-program*
4.6	**Fault Indication**	**F** Red	IND1_08 = 1	*Collective fault indication*
5	**Valve Open Text**	**OPEN** Green	PRES_B IND1_07 = 1	*User defined text*
	Valve Closed Text	**CLOSED** Green	PRES_A IND1_11 = 1	*User defined text*
6	**Error 1**	**PEO** Red flashing	AU_IND1_02 = 1	*Unack Position Error Open*
		PEC Red flashing	AU_IND1_03 = 1	*Unack Position Error Close*
		PEO Red	IND1_02 = 1	*Position Error Open*
		PEC Red	IND1_03 = 1	*Position Error Close*

No	Description	Presentation	Condition	Remarks
7	**Error 2**	**Fault 1** Red flashing	AU_IND1_00 = 1	*Unacknowledged Fault 1*
		Fault 2 Red flashing	AU_IND1_01 = 1	*Unacknowledged Fault 2*
		Fault 1 Red	IND1_00 = 1	*Fault 1*
		Fault 2 Red	IND1_01 = 1	*Fault 2*
8	**Act Pres Text**		ACT_PRES_TEXT	*Actual interlock text*
		Red	IND2_07=0	*Not ready for start*
		Yellow	IND2_07=1	*Ready for start*

The conditions are in priority order. Underlined parameters are configurable.

Configuration:

Parameters	Affects	Options (bold is default)	Remarks
FrameColor	1. SelectFrame	**K16** (Black), any color	
NameFont	2. Header Name	**FC50**, any font	
ManModeColor	4.1 Mode	**K5** (Green), any color	
AutoModeColor	4.1 Mode	**K5** (Green), any color	
SequenceColor	4.2 Point Of Control	**K5** (Green), any color	
CentralColor	4.2 Point Of Control	**K5** (Green), any color	
LocalColor	4.2 Point Of Control	**K5** (Green), any color	

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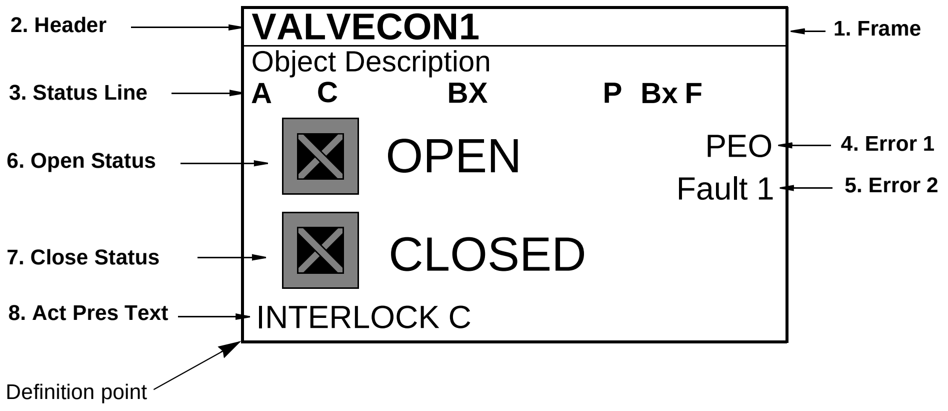
Presentation



Behavior:

No	Description	Presentation	Condition	Remarks
1	**Select Frame**			*Object select frame*
		White	SELECTED = 1	*Only for overlap*
		Black	-	
2	**Header**		NAME and DESCR	*Object name and description*
		Red flashing	AU_IND=1	*Unacknowledged alarm*
		Red	IND1_DIST=1	*Alarm*
		Green	-	*Normal*
3	**Status Line**			*Status Line*
3.1	**Mode**	**M** Green	IND2_05 = 0 and IND2_02 = 0 and IND2_03 = 0	*Manual mode*
		A Green	IND2_05 = 1 and IND2_02 = 0 and IND2_03 = 0	*Auto mode*
3.2	**Point of Control**	**O** Yellow	IND2_03=1	*Out of Service*
		T Yellow	IND2_02=1	*Test*
		L Green	IND2_01=1	*Local*
		S Green	IND2_04=1	*Sequence*
		C Green	IND2_01 = 0 and IND2_02 = 0 and IND2_03 = 0 and IND2_04 = 0	*Central*

No	Description	Presentation	Condition	Remarks
3.3	**Interlock Indication**	**X** Green	IND2_08 = 1 or IND2_09 = 1 or IND2_11 = 1 or (IND2_13 = 1 and IND1_12 = 0) or (IND2_00 = 0 and (IND2_10 = 1 or (IND2_12 = 1 and IND1_12 = 0)))	*Safety interlock or* *Operator interlock*
		BX Red	IND2_15 = 1	*Override Interlocks. Interlock IB1 or IB3 active*
		BX Yellow	IND2_00 = 1	*Override Interlock*
3.4	**Printout Blocked**	**P** Yellow	PR_BLK = 1	*Printout blocked*
3.5	**Alarm Blocked**	**B** Yellow	AL_BLK = 1	*Alarm blocked by operator*
		Bx Yellow	AL_P_BLK = 1	*Alarm blocked by PC-program*
3.6	**Fault Indication**	**F** Red	IND1_08 = 1	*Collective fault indication*
4	**Error 1**	**PEO** Red flashing	AU_IND1_02=1	*Unack Position Error Open*
		PEC Red flashing	AU_IND1_03=1	*Unack Position Error Close*
		PEO Red	IND1_02=1	*Position Error Open*
		PEC Red	IND1_03=1	*Position Error Close*
5	**Error 2**	**Fault 1** Red flashing	AU_IND1_00=1	*Unacknowledged Fault 1*
		Fault 2 Red flashing	AU_IND1_01=1	*Unacknowledged Fault 2*
		Fault 1 Red	IND1_00=1	*Fault 1*
		Fault 2 Red	IND1_01=1	*Fault 2*
6.1	**Valve Open Status**	☒ Green	IND2_07 = 0	*Not ready for start*
		⧈ Green flashing	IND1_12 = 1 and IND1_15 = 1	*Open* *No limit position open*
		⧈ Green	IND1_07 = 1	*Limit position open*
		▣ Green	IND1_07 = 0 and IND1_15 = 0	*No limit position open*
		⧄ Green	IND2_07 = 1 and IND2_14 = 1	*A-Interlock*
		Grey	IND2_03 = 1	*Out of service*
6.2	**Valve Open Text**	Green	PRES_A	*User defined text*

No	Description	Presentation	Condition	Remarks
7.1	**Valve Close Status**	☒ Green	IND2_07 = 0	*Not ready for start*
		⧈ Green flashing	IND1_13 = 1 and IND1_15 = 1	*Close* *No limit position close*
		⧈ Green	IND1_11 = 1	*Limit position close*
		▣ Green	IND1_11 = 0 and IND1_15 = 0	*No limit position close*
		⧄ Green	IND2_07 = 1 and IND2_14 = 1	*A-Interlock*
		Grey	IND2_03 = 1	*Out of service*
7.2	**Valve Close Text**	Green	PRES_B	*User defined text*
8	**Act Pres Text**		ACT_PRES_TEXT	*Actual interlock text*
		Red	IND2_07 = 0	*Not ready for start*
		Yellow	IND2_07 = 1	*Ready for start*

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